

# Catch our huge new product launch!



New  
Do-It-Yourself  
Home Security,  
Lighting Control,  
Video Surveillance,  
AV Cables & Networking

*High Technology for a  
Better Life @ Home*

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GIFT IDEAS**



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## Illuminate the heavens... or just your presentation 20 football fields away.



*Ultra-intense green beam is much brighter, goes much farther and is easier on the eyes than standard red lasers.*

Even the sleepest audience will sit up and salute when you whip out a laser pointer that's green, not red...and so bright, you could be standing nearly half a mile away. Using a wavelength closely matched to the highest sensitivity of the human eye and built with cutting-edge crystal technology, this laser projects a green beam so powerful you can see it against a clear sky at night. You won't believe how bright it is. Just think how much attention it will command from across the room! Handy pocket clip. Handsome matte black metal gift box and 2 AAA batteries included. Power output <5mW. Wavelength: 532nm. 90-day mfg. warranty.

Part No.	Description	Price
223731EF	Green Laser Pointer .....	\$199.95

## End laser doldrums. This pointer really points... and underlines.



*Make your point more creatively with this 3-shape laser pointer. It's a sure-cure for the "not-another-presentation" blues.*

Watch your audience take notice when your standard laser dot becomes a laser arrow or even a laser underline. Just twist the head of this powerful pointer, and the beam changes shape. Use the arrow to point to fine details in a photograph. Use the underline to emphasize text. The pointer features a solid



Choose from three shapes

brass housing with matte black finish and pocket clip. 2 AAA batteries (included) provide up to 3 hours of continuous use. Plastic gift case and 2-year manufacturer's warranty also included.

Part No.	Description	Price
223722EF	Ultimate Laser Pointer .....	\$69.95

## 2X magnifier gets you a closer look.

This folding 2X magnifier is very popular among professionals needing a large view magnifier plus the convenience of portability.

Made of high-quality plastic, the frame is light with a precision glass lens. An easy-to-read scale in both inches (scale of 1/16") and millimeters are etched on the base.



Size unfolded is 6.1"W x 5.3"D x 6.5"H.

Part No.	Description	Price
218296EF	2X Foldable Magnifier .....	\$9.95



## Expandable, great-sounding portable MP3 enjoyment, made affordable!

An economical digital music player with top-of-the-line features is now within reach of any budget. This lightweight, compact 64-megabyte player delivers 60 minutes of your favorite tunes, enhanced by a built-in equalizer with 4 custom presets. This pocket-sized powerhouse features a SmartMedia slot for easy expansion, a backlit display and fast USB connectivity, all at an absolutely unbeatable price.

Part No.	Description	Price
235459EF	Samsung YEPP MP3 Player .....	\$129.95

## They yawned when I pulled out my laser pointer. But when I switched it on...

Why settle for a humdrum laser pointer? Get this one and wake up the crowd. Yes, it does everyday "pointer-duty" with the best of them. But flip a switch, and it goes nuts—leaping, spiraling, swirling. The secret? An internal mirror mounted on a tiny spring that "springs" with your slightest movement. Think you can hold steady enough to stop it? Go ahead and try. Range: pointer mode – 500 yards; lightshow mode – 30 yards. Wavelength: 650nm. Power: <5mW. Class IIIa. 2-year manufacturer's warranty. Includes neck strap and batteries.

Part No.	Description	Price
223714EF	Laser Light Show-Black Case ....	\$29.95
223706EF	Laser Light Show-Red Case .....	\$29.95

## Just say the word, and watch your entertainment system respond.

Speak one command into your 8 device rechargeable remote control on the table beside you, and it will power up your TV and VCR, turn to channel 3 and press play! Recognizes up to 50 macro voice commands and responds to 4 different multi-lingual voices. Picture-in-picture, shuffle and disc change features make sure you'll never have to get out of your easy chair again.

*Hidden keyboard panel slides out to give you more options*



Part No.	Description	Price
236048EF	8-in-1 Voice Remote .....	\$79.95

*The farther away from your target, the bigger the show. Great fun for parties, family gatherings, science lessons, even dull meetings.*

*Hours of different patterns, all shapes and sizes*



## Finally, a Sennheiser cell phone headset. Quality sound at last.

*Enjoy cleaner, clearer sound with this lightweight in-the-ear headset.*

The first name in headphones introduces their first in-the-ear cell phone headset with the superb sound quality you'd expect from Sennheiser. This headset uses the latest technology for clean, clear sound...then delivers it directly into your ear canal, not outside where it has to compete with background noise. The microphone boom is bendable and won't budge so it will always be in the right position. Earhook slips over either ear. Weight: 0.5 oz.,

Headphone freq. resp.: 20-22,000 Hz. Impedance 32Ω. Omnidirectional microphone freq. resp.: 40-15,000 Hz. Impedance: 1.4kΩ. Sensitivity: 12 mV/Pa. 2.5mm jack fits most mobile phones. Backed by Sennheiser's 2-year warranty.

Part No.	Description	Price
227096EF	Sennheiser Telephone Headset ....	\$21.95





## Hot no-touch thermometer technology at a very cool price.

Shown  
Actual Size



Take exact temperature readings with this tiny beauty in tight, unreachable or hazardous locations, from a safe distance and without the need for contact with the target. Just point the integrated laser pointer at the spot you want to measure and get a precise readout on the large, digital display. The data hold/max hold allows easy recording and comparison measurements, and a wide temperature range (-58°F to +518°F) gives you maximum flexibility. At just 2.7 ounces you can carry it anywhere. Flip a switch to shift from °F to °C for different applications. The 6:1 field of view can pinpoint hot spots easily. Works with two included AAA batteries.

Part No.	Description	Price
219361EF	Extech No-Touch Thermometer	\$59.99

## New submersible thermometer for less than \$20!



- 2.75" stainless steel stem
- Digital display of 0.1° resolution
- MAX/MIN recall of high and low temperature
- °C/°F switchable ranges from -40°F to 392°F (-40°C to 200°C)
- HOLD and AUTO-OFF features
- Size: 5.9"L x 0.8"W x 0.7"T

Includes: LR44 battery and protective cover

Part No.	Description	Weight	Price
218077EF	Extech Waterproof Thermometer	0.1 lbs.	\$18.95



Waterproof housing allows thermometer to be completely submerged in liquid.

NEW

See detailed Product Index on pages 98-99

DIY Remote Controlled Lights & Security ..5-17

Integrated Circuits .....18-21

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### PRICES

Prices are effective 10-20-03.

Prices and discounts are subject to change without notice.

## Utilitarian high technology for a safer & happier holiday @Home.

Our new Jameco@Home catalog adds extensively to our current selection of electronics and computer product lines. We've added a whole new array of utilitarian technology that'll make your personal life easier, more productive, and more interesting. See our new lines of DIY security, remote controlled lighting, and wireless AV monitoring equipment. Plus, we've added just about every audio/video cable possible while expanding our networking offering. Each category delivers dozens of new items in stock at the low prices you appreciate from Jameco.

### Missing something?

We've slimmed down this home version of our catalog to make it easier for our customers @Home to find the products you need most. On our website you'll find everything Jameco carries including thousands of additional electronic components, computer products, test equipment & more. Visit us today at:

[www.Jameco.com](http://www.Jameco.com)



DIY Home Security is all **NEW** on pages 10-17.



DIY Remote Control Lighting is all **NEW** on pages 7-9.



Tools make great gifts too!  
**NEW** tools on pages 56 & 60.



Great gifts & gadgets throughout;  
brand names at a discount!

**Just-in-time stocking only at Jameco.**

Take advantage of our "just in time" fast delivery. Only Jameco has stocking levels that guarantee 99% in-stock availability! Call any weekday before 6:00 PM EST, and you can be assured you can have it the next morning.

**Don't get frustrated... find it at Jameco!**

Come to Jameco for popular electronic components, computer products, test equipment, and our latest selection of products for your home and personal use; all at unbeatable prices. You can also find those elusive and frustratingly hard-to-find items, and even some out-of-production parts, too! Join the multitudes of happy Jameco customers... You'll be glad you did.

**The Color Code Legend...**

For easy reference we have included this color code legend on every page.

**Find New Products Quickly**

Look for the part numbers in magenta.

**Save on Sale Items!**

Sale products are highlighted in **yellow** and **red**, so you can identify items whose prices have been reduced in all quantities.

**Last Chance Opportunities**

Unfortunately we're not always able to restock certain hard-to-find products. In this case we'll print **blue** part numbers, so if we know there's limited stock, you'll also know.

**Hard-to-Find Products**

Some products are no longer produced, and yet we know you need them. That's why we occasionally offer pulled or refurbished products. Pulled part numbers are clearly printed in **purple** and refurbished in **brown**. Each is backed by our standard Jameco warranty.

Color Code Legend	
SALE	REFURBISHED CLOSEOUT

NEW

SALE

Part No.	Product No.	Price	Description	1 10
4400	7400	14	Small 2 Input NAND gate	14.00
4400	7400	14	Small 2 Input NAND gate	14.00
4400	7400	14	Small 2 Input NAND gate	14.00

Part No.	Product No.
155643	DC603F1

Part No.	Product No.
25101	MC146818

**Jameco's Low-Price Guarantee**

We'll match the advertised price of any like product. It's that simple!

**Our Low Price Guarantee Doesn't Get Much Use...**

... And we like it that way. We take our Low-Price Guarantee seriously, so we search around the world to identify the sources for the lowest prices for our high-quality products. In fact, we have a team of people dedicated to keeping up to date with our competition and their prices.

**The Jameco Advantage...****Low-Price Commitment**

We'll match the advertised price of any like product. It's that simple.

**Around-the-Clock Ordering**

You can call us at 1-800-455-6119 24x7x365 to place your order. Or visit us on the web at <http://www.Jameco.com>.

**Same Day Shipping & Always In-Stock**

99% of orders placed by 6 PM EST are shipped the same day, and 99% of our items are in-stock!

**Help Avoid Duplicate Catalogs**

While we don't intend to send multiple catalogs to the same person, on occasion we do make mistakes. If you're incorrectly receiving multiple catalogs, please visit our web site at [www.Jameco.com/DupCats](http://www.Jameco.com/DupCats) and we'll remove the duplicates. Alternatively, you can mail the duplicate back-covers to us:

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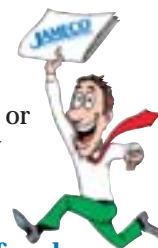
New Zealand: 080-044-0470

**Refer a Friend**

Are you tired of loaning your latest copy of the Jameco catalog to a friend or business associate? If they can't take a hint just visit our website at:

[www.Jameco.com/CatReferral](http://www.Jameco.com/CatReferral).

We'd be happy to send them a catalog too!



Just plug the mini receiving decoder into your video input, and see!



It's a wireless camera! Screws into any regular lightbulb socket.

## Lightbulb camera. Just screw it in, plug in the remote, and see via TV!

The bulb looks like a standard fixture, but it really contains a mini-cam and transmitting encoder in a sturdy, weatherproof enclosure. Simply screw the bulb-camera into any outdoor light socket, plug the mini-receiving decoder into any TV in your house, and you are ready to watch the peace-of-mind channel. Installation couldn't be easier.

You'll get a clear birds-eye view of your security perimeter without fishing wires through walls, drilling holes, mounting antennas, or changing and checking batteries. Transmission is through your home's own wiring. While your other outdoor lights illuminate the scene, the SecureView outdoor camera provides the picture. Feel safer today.

Part No.	Description	Price
219379EF	Outdoor Camera and Decoder...	\$199.99

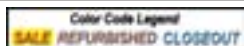


Emits a soft amber glow

## Night-time visibility, First Alert™ reliability, with bargain-priced affordability!

Wow! You get four for under ten bucks! These beauties do one important thing, and they do it very well: they come on when it's dark, and go off when it's not, safely and reliably. Just plug them into outlets in hallways, your workshop or the children's rooms and you'll always have light, right where you need it. At this price, you can enjoy "night vision" throughout your home! Shipped in sets of four.

Part No.	Description	Price
235037EF	4 Automatic Night Lights .....	Only \$9.95



## Locked out again? Keep a spare key handy, but off-limits to thieves.

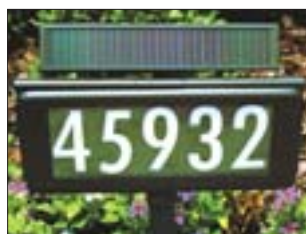
Never get locked out of your car or house again. Get peace-of-mind knowing a spare key is available to you, and only you.

Inside the wheel well? Under the bumper? In a hollow "rock" or under a flowerpot? Hide a key near your home or car, and you've just set out the welcome mat for thieves. But now you can get to a spare key in seconds... and thieves can't get to it ever. These weatherproof 1.5-lb. key vaults molded of drill-proof, sawproof titanium and zinc alloy open only when you press your preset combination on the 10-button keypad. Mount one in minutes to your car, truck or an outside

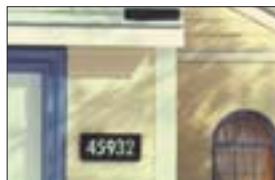
wall of your home. No need to find the perfect hiding place — even if they see it, they can't get in! Give temporary access to anyone you choose, like contractors or service workers, then change the combination and they won't get in again. The black weatherproof cover seals out moisture and dirt. The keyring built into the cover makes sure you return the key to the box for next time. Includes all mounting screws.



Part No.	Description	Price
223925EF	Auto/SUV StorAKey with Weather Cover .....	\$39.95
223941EF	Home/Office StorAKey w/ Weather Cover (clay) .....	\$39.95
223933EF	Home/Office StorAKey w/ Weather Cover (white) .....	\$39.95



Daytime



Hang it, or use it on the enclosed post!



Nighttime

## Get your address noticed without wiring hassles!

Your friends, the pizza delivery guy, and if the need ever arises, emergency services won't miss your house again because you forgot to turn on the light. Our fully customizable, illuminated sign announces your address with clarity and class, day and night. Its sealed solar panel and rechargeable power cells mean you won't have to worry about running wires, changing batteries, or wasting electricity. On at sundown, off at dawn, this sign is a fully automatic, weatherproof and theft resistant way to make sure your house is found. Hang it on your home, or use the enclosed post. Works like a charm.

Part No.	Description	Price
219272EF	Solar-Powered House Light .....	\$49.95

## Don't ever be caught vulnerable. Wireless light anywhere the sun shines!

Dark spots around your business, house or neighborhood are vulnerable to vandalism or burglary. To protect your property, equip it with our new outdoor security lights and motion sensors. This solar outdoor security light has all the answers to your needs. All you need are simple tools to mount the unit to the wall. No complicated wiring or electrician needed. The built-in batteries are rechargeable by sunlight, so if the main power goes out you still have security lighting. The solar panel, which has a 12' cord, can be positioned

for optimum light exposure.

- Lights up to 60 times on a single charge
- Charges by day, lights by night
- Complete with built-in motion detector, rechargeable battery and bright halogen light
- Easy to install • Weight: 7.1 lbs.

Part No.	Description	Price
219580EF	Solar Outdoor Floodlight .....	\$79.95





# The home of the future is yours now. Enjoy convenience and protection with our **automated security and lighting control**.

*Our wireless automated lighting and security systems offer convenience and peace-of-mind at a price anyone can afford.*

**I**MAGINE CONTROLLING your home lighting or securing your home with the touch of a button. Pull into the driveway and the house lights come on. Push a button from your bedroom and all the house lights go off. Push a button in your home theater or TV room, and the lights dim to ideal viewing levels. Push a button and your security system is armed. No more fumbling for hard-to-reach switches. No more trying to remember which

switch controls what. No more wondering if that noise downstairs might be an intruder.

On the next several pages, you'll find products that can transform your home into a safe, comfortable haven for you and your family. There's no wiring to run, no monthly fees, and, best of all, they're priced so low there's no reason to spend another night feeling vulnerable. So go ahead; discover how easy and affordable we've made it to automate your home right now.

DIY Home Upgrades	Page
DIY Home Lighting Upgrades	7
Whole-House Lighting Control (RF)	8, 9
Home Security Systems	10, 11, 13
Home Surveillance Systems	12, 13



Control lamps and other lighting from your favorite chair in your TV room or home theater (p.7) or from anywhere in your home (p. 8, 9).



Turn on internal or external lights before entering (p. 8) and activate your home security system from your car (p. 10, 11).



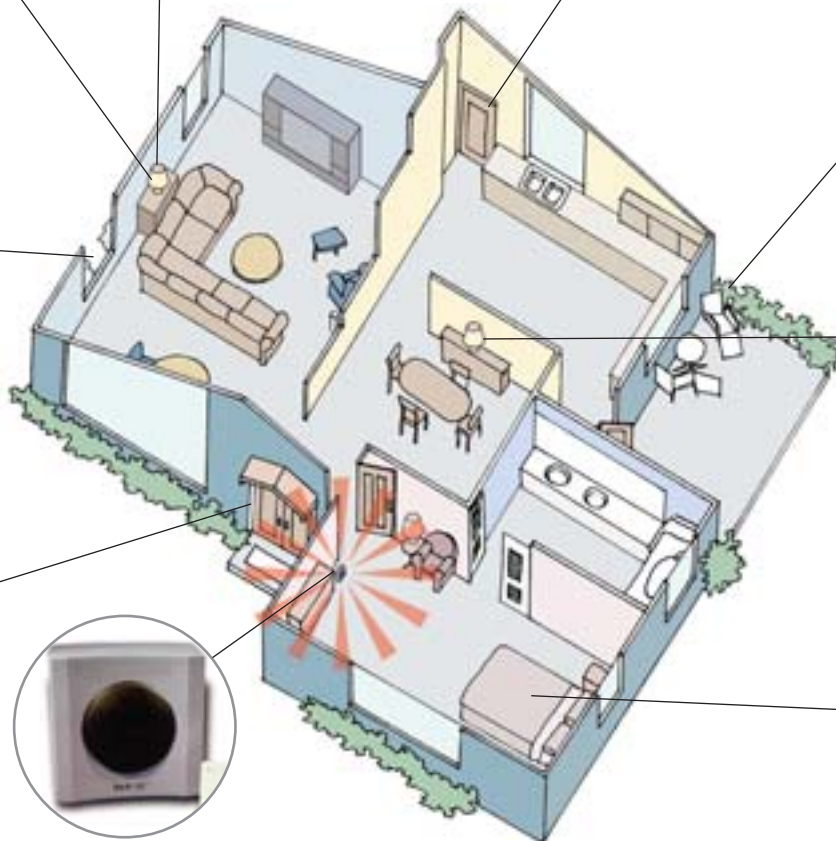
Motion Sensors in the Home Security Kit (p. 10, 11) sound the alarm if someone manages to get inside.



Surveillance cameras (p. 12-17) let you keep an eye on the action anywhere in your home.



Our Home Security System with auto-dialer tracks you down or alerts a friend by calling up to 4 phone numbers in the event of a break-in (p. 10, 11).



Dimmers instantly soften the light from overhead chandeliers and/or lamps in your dining room to set the right mood (p. 7-9).



Door and window sensors (p. 10, 11) alert you the instant an intruder tries to break in.



Detect and scare off would-be intruders with realistically loud and vicious-sounding barking from Bruiser, the Barking Dog (p. 13).



Turn specific lights or all the lights on and off remotely, even from your bed (p. 8, 9).

## The lights fade. The hush falls. The excitement grows. The adventure is about to begin.

Experience the drama and convenience of remote controlled lighting in your home theater or TV room without spending a fortune or rewiring your home. At the push of a button, the Lutron Home Theater System dims all incandescent and halogen lamps and lighting fixtures in the room to your preset preferences, even if your lights couldn't dim before. As the lights fade, you'll feel the excitement of being in a real movie theater. Preset up to 3 more lighting "scenes" with the Four-Scene Remote and go from movies to games to reading to snuggling to lights-out, all without touching a light switch. The dimmers will even respond to many programmable TV remotes!

### Installs in 15 minutes without wires.

Just plug your lamps into Lutron Lamp Dimmers and replace your wall switches with Lutron Wall Dimmers. That's all there is to it. You can operate any dimmer manually to control a single fixture.

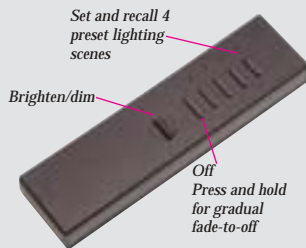
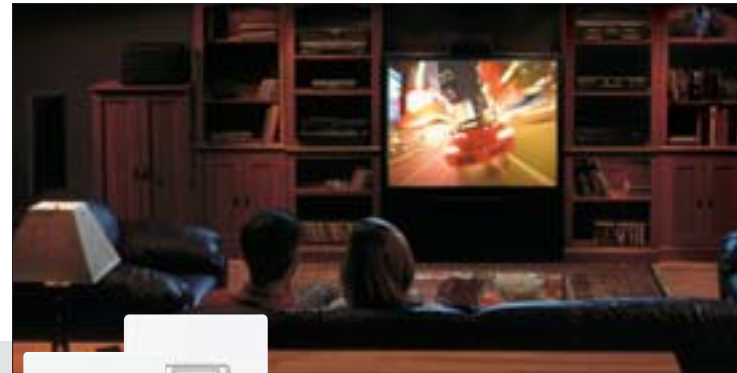
Or pick up the remote control and operate all the lights simultaneously. The Favorite Scene Remote lets you recall one lighting scheme instantly. The Four-Scene Remote lets you preset up to four lighting tableaux. Order the right type of dimmer for each light switch, but just one remote. Need help choosing the right components? Call our friendly and knowledgeable Technical Support team at 1-800-455-6119.

### How Dimmers Work

Our wall switch dimmer dims/brightens/fades lights manually or from a remote signal. For use with fixtures controlled by a single wall switch. For fixtures with two or more switches controlling the

same light, order one master and a companion switch for each additional switch. Order one to replace each wall light switch. 600W capacity. Note: Can be "ganged" in the same wallbox, reducing load to 500 watts (2-gang) or 400 watts (3-gang).

Bring down the "house lights" without leaving your seat. No fumbling, no wires, no fuss.



### Four-Scene Remote Control

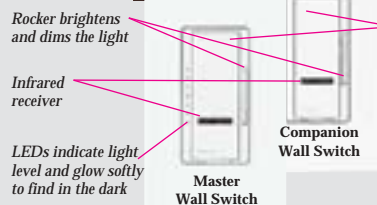
Recalls preset light levels for four scenes plus off, and fine tuning of light levels. Scenes are dependent upon dimmer settings. Range is 50' line-of-sight to receiver. Order one for entire room.

**235731EF** Four-Scene Remote .....\$99.99



### Favorite Scene Remote Control

Extra remote packaged with several dimmers. Recalls preset light levels for one scene plus off, and fine tuning of light levels. Range is 30' line-of-sight to receiver.



### Multi-Location Wall Switches

Buy one Master Wall Dimmer and an Accessory Wall Dimmer for each additional switch that controls the same light. Dimmers offer a large 600 watt capacity.

### Order a bundle and save!

We've bundled Favorite-Scene Remotes with a variety of switches and passed on the savings to you!

**Turn lights on:**  
• Tap once, lights gradually go on to your predetermined light level.  
• Tap twice, lights go on to full illumination  
**Turn lights off:**  
• Tap once, lights go off over 3 seconds  
• Press or hold, lights go off over 10-60 seconds



### Lamp Dimmer

Just plug in your lamp. Sits unobtrusively on table. Dims/brightens/fades lamp manually or from a remote control. Order one for each lamp. 300W capacity.

**235601EF** Lamp Dimmer .....\$89.99

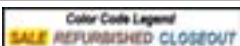
## IR Remote Controlled Dimmers and Accessories



Part No.	Description	Remote Included	Master Dimmer	Accessory Dimmer	Color	Price	Usage
<b>235643EF</b>	Single Master Wall Switch Dimmer	No	Yes	No	White	<b>\$94.99</b>	For use on lights with one wall switch
<b>235660EF</b>	Single Master Wall Switch Dimmer	No	Yes	No	Light Almond	<b>94.99</b>	For use on lights with one wall switch
<b>235651EF</b>	Single Master Wall Switch Dimmer	No	Yes	No	Ivory	<b>94.99</b>	For use on lights with one wall switch
<b>235619EF</b>	Single Master Wall Switch Dimmer and Remote	Favorite Scene	Yes	No	White	<b>124.99</b>	For use on lights with one wall switch
<b>235635EF</b>	Single Master Wall Switch Dimmer and Remote	Favorite Scene	Yes	No	Light Almond	<b>124.99</b>	For use on lights with one wall switch
<b>235627EF</b>	Single Master Wall Switch Dimmer and Remote	Favorite Scene	Yes	No	Ivory	<b>124.99</b>	For use on lights with one wall switch
<b>235678EF</b>	Master & Companion Wall Switch Dimmers	No	Yes	Yes	White	<b>134.99</b>	For use on lights with two wall switches
<b>235694EF</b>	Master & Companion Wall Switch Dimmers	No	Yes	Yes	Light Almond	<b>134.99</b>	For use on lights with two wall switches
<b>235686EF</b>	Master & Companion Wall Switch Dimmers	No	Yes	Yes	Ivory	<b>134.99</b>	For use on lights with two wall switches
<b>235707EF</b>	Master & Companion Wall Switch Dimmers & Remote	Favorite Scene	Yes	Yes	White	<b>164.99</b>	For use on lights with two wall switches
<b>235723EF</b>	Master & Companion Wall Switch Dimmers & Remote	Favorite Scene	Yes	Yes	Light Almond	<b>164.99</b>	For use on lights with two wall switches
<b>235715EF</b>	Master & Companion Wall Switch Dimmers & Remote	Favorite Scene	Yes	Yes	Ivory	<b>164.99</b>	For use on lights with two wall switches
<b>235890EF</b>	Companion Wall Switch Dimmer	No	No	Yes	White	<b>27.99</b>	For use with any IR Master Dimmer
<b>236902EF</b>	Companion Wall Switch Dimmer	No	No	Yes	Light Almond	<b>27.99</b>	For use with any IR Master Dimmer
<b>236911EF</b>	Companion Wall Switch Dimmer	No	No	Yes	Ivory	<b>27.99</b>	For use with any IR Master Dimmer
<b>235601EF</b>	Lamp Dimmer	No	NA	NA	Royal Plum	<b>89.99</b>	For use with any incandescent or halogen lamp
<b>235598EF</b>	Lamp Dimmer and Remote	Favorite Scene	NA	NA	Royal Plum	<b>119.99</b>	For use with any incandescent or halogen lamp
<b>235731EF</b>	Four-Scene Remote Control	Four-Scene	NA	NA	Royal Plum	<b>99.99</b>	For use with all dimmers listed above
<b>235803EF</b>	Decorative Screwless Faceplate	NA	NA	NA	White	<b>4.99</b>	For one switch
<b>235820EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Light Almond	<b>4.99</b>	For one switch
<b>235811EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Ivory	<b>4.99</b>	For one switch
<b>235838EF</b>	Decorative Screwless Faceplate	NA	NA	NA	White	<b>9.99</b>	For two switches
<b>235854EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Light Almond	<b>9.99</b>	For two switches
<b>235846EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Ivory	<b>9.99</b>	For two switches
<b>235862EF</b>	Decorative Screwless Faceplate	NA	NA	NA	White	<b>14.99</b>	For three switches
<b>235889EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Light Almond	<b>14.99</b>	For three switches
<b>235871EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Ivory	<b>14.99</b>	For three switches
<b>235897EF</b>	Decorative Screwless Faceplate	NA	NA	NA	White	<b>19.99</b>	For four switches
<b>235918EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Light Almond	<b>19.99</b>	For four switches
<b>235900EF</b>	Decorative Screwless Faceplate	NA	NA	NA	Ivory	<b>19.99</b>	For four switches

All Lutron Dimmers work on incandescent and halogen lights only.

Order 24/7 Toll Free 1-800-455-6119





# Control every light in your home from your chair, your bed, or even

IT'S 11:30 P.M. and the house is ominously dark as you pull into your driveway. Do you enter blindly, lunging for the nearest light switch? No. From the safety of your car, you push a button on a keychain remote, and the front porch and downstairs blaze with light, seeing you safely inside. Later, as you slip into bed, you push a button on a handheld remote, and the whole house goes dark.

Our automated lighting control system using X10 technology lets you operate the lights in your home from your car or from anywhere in your home. You can turn on, turn off or dim lights, even if they couldn't dim before. A single button can operate individual lights, groups of lights, whole rooms, or even the whole house. It works with lamps, wall-switched fixtures, even appliances.

**As easy as replacing a switch. No new wiring!** Just plug your lamps into Lamp Dimmers and replace your wall switches with Master Dimmers. Replace multi-location switches with a Master Dimmer and Companion Switch(es). Plug the Transceiver into a wall outlet, and you're done. The remotes communicate with the transceiver via radio frequency signals that travel up 100', even through walls. That means you don't have to be in the same room as the lights you're controlling—you don't even have to be in the house. The transceiver sends your commands to the dimmers through the wiring already in your walls.



Never fumble over a light switch or trip over the unexpected again. With a handy remote in your bathrobe pocket you'll light your path safely down the hall or stairs with just a single touch.



Turn off all the lights—even the television—from bed.

### Think of the possibilities.

Left the garage light on? Turn it off from your chair. Working around the house? Light rooms completely with one button; darken them as you leave. Entertaining guests? Dim the lights for dinner or a movie; brighten them for good-byes. Time to turn in? Turn out every light in the house at once. Suspicious noise in the night? Blast the whole downstairs with light from the safety and comfort of your bed. You're in control, once and for all.

### Home Lighting Control Kit

Our economically priced starter kit contains everything you need to control one lamp and one wall-switched lighting fixture from your car or home. To control multiple lights from one place, you'll want to add dimmers for each light source in your home or garage. Order additional Keychain Remotes for other family members, and additional House Remotes for upstairs, bedrooms, or wherever you need them. You'll find these additional components and accessories on the facing page.

Part No.	Description	Price
236478EF	Home Lighting Control Kit ..	\$99.99

## Home Lighting Control Kit Includes Everything Here:

### House Remote Control

Turns on or off, dims or brightens up to 16 individual lights or up to 16 groups of lights whose receivers are set to the same "address". For instance, turn off all downstairs lights with one button. Works up to 100' from transceiver.



**Keychain Remote Control**  
Turns on/off and dims two lights or two groups of lights from within a closed car. Up to 50' range.

### Master Dimmer Switch/Receiver

Replaces standard light switch. Allows manual control of connected fixture, or responds to remote signal. For fixtures with more than one switch, use Master Dimmer with Companion Dimmers (below). 500W max.



### Companion Dimmer Switch/Receiver

For use on fixtures controlled by two or more switches. Replace one switch with Master Dimmer Switch and all other switches with Companion Switches. All switch locations must be replaced.

### Lamp Dimmer/Receiver

Allows you to control (on/off/dim) lamps manually or remotely. Plug controller into wall outlet; plug lamp into controller. 300W max.



### Transceiver.

Plug into any wall outlet. Receives signals from your remotes up to 100' away and sends on/off/dim commands to lamp and lighting fixture receivers through your home wiring. Also includes an outlet for controlling a lamp or appliance, such as a TV. Each transceiver controls up to 256 devices.

# your car! No new wiring. No trekking from switch to switch.



Light the porch and entry hall before leaving your car.

## Frequently Asked Questions

### Can I remotely control devices besides my lighting, like my TV or coffeepot, for instance?

Yes, but you need to be sure to use the right controller for the device controlled. Appliances such as your television or coffeepot need a steady voltage level, so they should be plugged directly into the transceiver or appliance module. Never plug appliances into controllers that dim, such as the lamp or wall dimmers. The transceiver is rated for 20 Amps inductive (TVs are inductive) or 500 watts incandescent. The appliance module is rated for 15 amps or 500 watts. Many heated appliances, such as coffeepots, draw more, so be sure to check.

### You said the House Remote can control up to 16 lights or groups of lights. What does that mean?

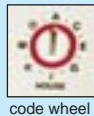
Each receiver/dimmer and transceiver in the system contains two 16-position "code wheels" that allow you to assign any of 256 unique "addresses" to that receiver. That address corresponds to one of the buttons on the House Remote. When you push the button on the remote, any receiver with that address will respond. But you don't have to give each receiver its own address; you can assign the same address to several receivers. So whenever you push that button on the remote, the entire group of receivers at that address respond. That's handy if you frequently want several lights to respond at the same time—in your home theater, for instance, or in your kitchen or garage. It also means that your 16 button remote can actually be used to control up to 256 devices.

### What if I want to turn "all off" and some are already off? Will I end up playing "Whack-A-Mole"?

You don't have to worry about what state the lights are in—the system knows. It puts the lights in the state you want, no matter what state they're currently in.

### Can I use this system on fluorescent lights or bulbs?

No, this system is designed only for incandescent lighting.



code wheel

## Customize Your Automated Lighting System with Compatible Add-On Components

### House Remote Control

Turns on or off, dims or brightens up to 16 individual lights or up to 16 groups of lights whose receivers are set to the same "address". For instance, turn off all downstairs lights with one button. Works up to 100' from transceiver. One remote controls all transceivers.

Part No.	1	4	8
236603EF	\$19.99	\$18.99	\$17.99



### Keychain Remote

Turns on/off and dims two lights or two groups of lights from within a closed car. Up to 50' range.

Part No.	1	4	8
236558EF	\$19.99	\$18.99	\$17.99



### Lamp Dimmer/Receiver

Allows you to control (on/off/dim) lamps manually or remotely. Plug controller into wall outlet; plug lamp into controller. 300W max.

Part No.	1	4	8
236591EF	\$14.99	\$14.24	\$13.53



### Mount-Anywhere 3-Device Wall Switch

Mount this pressure-sensitive switch anywhere you wish you had a wall switch. No wiring! Communicates with the transceiver via RF signals. Three buttons control three lights or groups of lights anywhere in the system. Fourth button dims.

Part No.	1	4	8
236566EF	\$24.99	\$23.74	\$22.55



### Motion Detector with 2 Floodlights

Mounts outside under eaves. Turns on floodlights and selected indoor lights when motion is detected or at dusk.

Part No.	1	4	8
236611EF	\$59.99	\$56.99	\$54.14



### Master Dimmer Switch/Receiver

Replaces standard, single-location light switch. Allows manual control of connected fixture, or responds to remote signal. 500W max.

Part No.	1	4	8
236574EF	\$19.99	\$18.99	\$17.99



Master Dimmer

### Companion Dimmer Switch/Receiver

For incandescent lights controlled by two or more switches, order one Master Dimmer Switch (above), plus one Companion Switch for each additional switch location.

Part No.	1	4	8
236582EF	\$14.99	\$14.24	\$13.53



Companion Dimmer

### Plug-in Appliance Module

Controls appliances such as fans, air conditioners, dehumidifiers, coffeepots, stereos, TVs, etc. Rated at 15 amps, 1/3 h.p., 500W.

Part No.	1	4	8
236857EF	\$14.99	\$14.24	\$13.53





Security without sacrifice  
Dial-out Home Security Alarm System stops break-ins without

ASK ANYONE who's ever gone through it: When someone breaks into your home, they don't just take your family's treasured possessions. They steal your sense of security. You deserve to feel safe, but why pay for overpriced monitored alarm systems? Between the installation charge, the disruption while they run wires through your walls and the monthly fees, it won't be long before you've paid out a lot more than a burglar could ever carry away.

But now you can get a monitored home alarm system that's every bit as effective as some systems costing thousands of dollars. Without the high cost. Without the wires. Without the contract negotiations. Without the mess. And without all those never ending fees!

**Not just a local alarm—it actually dials out.** Our Home Security Alarm System with wireless X10 technology sets up in minutes without any new wiring. It protects you whether you're at home or away. And if anyone tries to break in, dual piercing alarms alert the whole neighborhood and the Security System Dial-up Console calls up to four numbers you've selected for help with your pre-recorded message.



Here's how fast and easy it is to set up.

1. Mount the door and window sensors and motion sensors with screws and double-sided tape. All mounting hardware and batteries included. You can protect up to 16 zones using motion detectors and door and window sensors.
2. Plug in the light dimmer between a lamp and the wall.
3. Plug in the Blaster Siren.
4. Plug in the Console/Dialer, program it with 4 numbers and record an outgoing message. Don't worry, it won't interfere with your answering machine.

You're done!

**No codes, no scrambling, no false alarms.** Push a button on the Security Keychain Remote to disarm the system and turn on the lights before you enter. Push it again to arm the

- Detects interior motion and window and door entry when you're away.
- Detects door or window entry when you're home.
- Flashes lights to help police find your house.
- Blasts two excruciatingly loud sirens.
- Calls up to 4 numbers until it reaches a live person who can hear your prerecorded message and call the police.

system after you leave. There are no codes to remember, no race against the alarm. It's as easy as locking and unlocking your car, so your family won't be tempted to "skip it."

When you're in for the night, push a button on the Security Remote to arm just the door and window sensors. Now you can move freely and confidently about your home, knowing the perimeter is secure. A "Panic Button" on either remote instantly activates the alarm if you're in danger.

**Piercing alarms are just the beginning.**

If a break-in occurs, the Console sounds a warning beep for 30 seconds in case you forgot to disarm the system. Then the Console blares an 85dB siren while the Blaster bellows another 110dB warning through the neighborhood, sending intruders running. The lights flash to help police find your house. And the Console dials each preset telephone number in turn until it reaches a human being—it isn't fooled by answering machines. It plays your pre-recorded message (Example: "This is a security system alert from Martin Green. There is a burglary in progress at 2745 Elm Street. Please call police."). Then it allows the person on the other end to listen in on your home for sounds that would help recognize suspicious activity or even identify the perpetrators.

Some communities charge residents for too many false alarms—a real problem for users of monitored systems. Monitoring companies always call the police if you don't answer the phone. But our Home Security System lets you or those you trust decide if the alarm appears to be real or false. If it's real, you call the police just like the monitoring company would. But you pay no monthly fees, no false alarm fees, and the police take you seriously when you really need them. It works, it's easy and it's inexpensive. Why wait another day to protect your family?



After playing your prerecorded message, the Console becomes a room monitor, allowing the person to listen in for clues to activity or even identities.



breaking your budget. No monthly fees. No wires. No strings.

Here's all you get for under \$200! Ten-piece home security alarm kit includes:

**Security System Dial-Up Console & Transceiver**  
Plugs into any wall outlet and includes battery backup. Receives signals from your security keychain or home remote up to 100' away and sends commands to alarms, and lighting fixtures through your home wiring. Contains 85dB siren.

**Security System Indoor Motion Sensor**  
Install indoors facing paths where an intruder would pass. Detects heat and motion and triggers the alarm.

**Security Remote Control**  
Arms and disarms entire system or perimeter (door/window) sensors only. Disables active alarm, activates alarm with panic button. Turns up to four lights or groups of lights on or off. Works anywhere in the house, up to 100' from Console.

**Blaster Siren**  
Screws into wall plug. Sounds a neighborhood-piercing, 110-decibel siren for 4 minutes or until deactivated.

**Security Keychain Remote Control**  
Arms, disarms, disables active alarm, and activates alarm with panic button. Turns lights on or off.

**Door/Window Sensors (2)**  
Triggers alarm when a door or window is opened.

**Lamp Dimmer/Receiver**  
Allows you to control (on/off/dim) lamps manually or remotely. Plug controller into wall outlet; plug lamp into controller. 300W max.

Part No.	Price
<b>236486EF</b>	Complete Ten-Piece DIY Home Security Alarm System... <b>\$199.95</b>

Part No.	Price
<b>236486EF</b>	Home Security Alarm System <b>\$199.99</b>

Add-On Components for Home Security Alarm System

Customize your security system to protect your entire home with these 100% compatible add-ons. You may use up to 16 combined door/window and motion sensors and up to 16 combined house or keychain remotes. Note: Security System sensors and remotes are not interchangeable with other system sensors and remotes offered in this catalog. The dimmer switches on pages 8, 9, 11 and 13 are the same for all systems.

Security Remote Control

Arms and disarms entire system or perimeter (door/window) sensors only. Disables active alarm, activates alarm with panic button. Turns up to four lights or groups of lights on or off. Works anywhere in the house, up to 100' from Console.

Part No.	1	4	8
<b>236620EF</b>	\$26.99	\$25.64	\$24.36

Security System Indoor Motion Sensor

Install indoors facing paths where an intruder would pass. Detects heat and motion and triggers the alarm.

Part No.	1	4	8
<b>236638EF</b>	\$49.99	\$47.49	\$45.12

Lamp Dimmer/Receiver

Allows you to control (on/off/dim) lamps manually or remotely. Plug controller into wall outlet; plug lamp into controller. 300W max.

Part No.	1	4	8
<b>236591EF</b>	\$14.99	\$14.24	\$13.53

Security Keychain Remote Control

Arms, disarms, disables active alarm, and activates alarm with panic button. Turns lights on or off.

Part No.	1	4	8
<b>236646EF</b>	\$19.99	\$18.99	\$17.99

Blaster Siren

Wireless, battery-operated alarm mounts outside up to 100' from Console. Sounds a neighborhood-piercing, 110-decibel siren for 4 minutes or until deactivated.

Part No.	1	4	8
<b>235977EF</b>	\$39.99	\$37.99	\$35.99

Door/Window Sensor

Triggers alarm when a door or window is opened.

Part No.	1	4	8
<b>236005EF</b>	\$19.99	\$18.99	\$17.99

Motion Sensor with 2 Floodlights

Mounts outside under eaves. Turns on floodlights and selected indoor lights either when motion is detected or at dusk.

DOES NOT TRIGGER ALARM.

Part No.	1	4	8
<b>236611EF</b>	\$59.99	\$56.99	\$54.14

Master Dimmer Switch/Receiver

Replaces standard, single-location incandescent light switch. Allows manual control of connected fixture, or responds to remote signal. 500W max.

Part No.	1	4	8
<b>236574EF</b>	\$19.99	\$18.99	\$17.99

Companion Dimmer Switch/Receiver

For incandescent lights controlled by two or more switches, order one Master Dimmer Switch (above), plus one Companion Switch for each additional switch location.

Part No.	1	4	8
<b>236582EF</b>	\$14.99	\$14.24	\$13.53



# Control up to 16 cameras with one hand. Keep an eye on the kids, the pool, the front door, the babysitter, all at once.

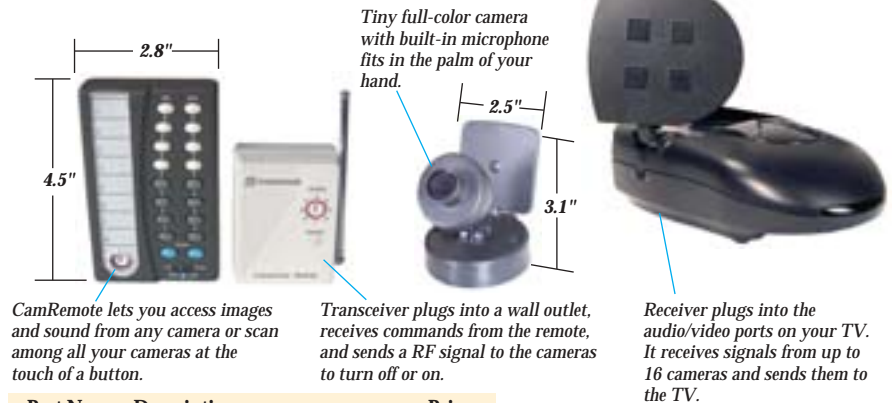
**Y**OU'RE ALONE in the house on the computer. You've got the kids playing outside, the baby napping in the nursery, the hole-digging dog in the backyard, and now there's a knock at the front door. You can't be in ten places at once, but with our Surveillance Kit and Accessories, you can do the next best thing: from one location, you can see and hear exactly what's going on all around your home or office. And not just in ten places, but in *up to sixteen* areas as close as inside your home, or as far as 100' away.

## Installs anywhere without wiring.

If you've seen surveillance cameras that were a hassle to install and awkward to monitor, wait until you see these. They're so compact, they're virtually unnoticeable. They require no wiring beyond plugging a cord into an electrical outlet; not even that with our battery pack. They use X10 radio frequency technology to send both *audio and color video signals* right through walls to your TV. And you can view the image from any camera, or scan up to 16 of them, with a single remote control.

Just place or screw-mount the cameras wherever you want them, and plug their power supply into an indoor or outdoor AC outlet. Use the supplied cable to connect the Audio/Video Receiver into your TV. Plug the transceiver

**You get all this for just \$119.95.**



Part No.	Description	Price
<b>236494EF</b>	Surveillance Starter Kit .....	<b>\$119.95</b>

into a wall outlet. Now you're ready to sit back and use the remote to view any or all surveyed areas. The remote automatically turns each camera on when you select it for viewing and turns it off when you switch to another camera.

## Home security is just the beginning.

Put a camera on the front porch and see who's outside your door before you open it. Put one in the garage to protect your expensive power

tools. Put one in the backyard to keep an eye on your kids and pets. Put one by the pool to prevent accidents. Put one in the nursery to keep an eye on the baby. Place a camera to see who's coming up the driveway too. Use them at your small business to keep tabs on supply closets, inventory and other valuable assets.

## Kit contains all you need to monitor one area.

Our four-piece Surveillance Kit gives you everything you need to monitor one area. It includes one wireless camera with power supply, one receiver which plugs into your TV's audio/video jacks, one CamRemote remote control, and one transceiver. To survey additional areas of your home, just add more cameras from the facing page—one receiver manages input from as many as 16 cameras.

## Home video camera captures kidnapping, leads to safe release of young captive.

SAN JOSE, CA. — On June 6, 2003, a 9-year-old girl was violently kidnapped while her mother and brother were injured trying to save her. Much of the ordeal, including the behavior of the kidnapper just before the girl arrived home, was caught by a neighbor's video surveillance camera. The video made it clear to authorities the man was specifically targeting the girl, which allowed them to narrow their search. Three days later, the kidnapper, hounded by repeated broadcasts of the video and the knowledge that police were closing in on him, unexpectedly released the girl. The neighbor's home video camera probably saved her life.

## The signal travels up to 100' so you don't have to.

*Place a camera facing your backyard and keep an eye on your children and your neighbor's children as they play.*

*The camera's radio frequency signals travel right through walls to the receiver. No wires needed.*

*Place a camera at the front door and see who's there before you answer.*

*Displays color images on any TV with audio and video input jacks.*

*A built-in microphone lets you hear as well as see what's taking place. Was that your baby crying? Take a look without walking down the hall.*

*Using the CamRemote, you can turn each camera on or off and view the still images on your TV from the comfort of your favorite chair.*

*Effortlessly monitor activities in and around your home to prevent accidents, break-ins, and to make sure your children are safe. Our wireless Surveillance Kit makes it easy. Just plug it into your TV, and scan the camera locations with the remote control.*





## Customize Your Surveillance System for Your Home

Our Starter Kit gives you the basics, but in order to keep tabs on all areas of your property, you'll probably need to survey more than one area. These accessories allow you to create a custom system designed for your home and your convenience.

### Additional Camera

Place as many as 16 cameras around your home or office. They'll all work with your existing X-10 system's receiver and transmitter. 3.1"H. x 2.5"W. x 4"D.



Part No.	1	4	8
<b>236662EF</b>	\$69.99	\$66.49	\$63.17

### Audio/Video Receiver

For each additional TV you'd like to use as a monitor, add one A/V Receiver. You'll probably want to add a CamRemote for each TV for convenience. 4.8"H. (deployed, as shown) x 3.8"W. x 6.1"D.



Part No.	1	4	8
<b>236654EF</b>	\$49.99	\$47.49	\$44.99

### Additional CamRemote

Stash an additional CamRemote in every room with an A/V Receiver (above), and keep watching as you move around the house. 4.5"H. x 2.8"W. x 0.8"D.



Part No.	1	4	8
<b>236689EF</b>	\$29.99	\$28.49	\$26.99

### Camera Battery Pack

Get up to 4 hours of cord-free power. Makes the Camera completely portable so you can monitor

your teen's party in the basement tonight, and take it outside to the family picnic tomorrow. Connect the A/V Receiver to your VCR, and capture the memories. 1.7"H. x 3.5"W. x 3.7"D.



Part No.	1	4	8
<b>236671EF</b>	\$24.99	\$23.74	\$22.55

Didn't find what you are looking for here? You'll find our entire line on our website. Log on today!

**www.Jameco.com**

## Deadly realistic digital guard dog sends prowlers packing.

**H**OME ALONE? A prowler has you marked as easy prey. But as he approaches—long before you would hear a sound—your trusty companion detects his presence and unleashes a torrent of deep-throated, flesh-ripping barks so frighteningly realistic, you may get sweaty palms yourself. The prowler? As far away as he can get.

Bruiser, the Barking Dog Alarm System makes it sound like you've got a huge, vicious guard dog just waiting to get loose. The digitally sampled and enhanced amplified recording sounds so authentic, anyone sneaking around outside would head for the hills.

### Set up in 15 minutes—no wiring.

The system includes two battery-operated motion sensors, "Bruiser" (speaker/receiver), and a two-button keychain remote.

Mount the motion sensors outside or indoors, plug in Bruiser near a likely entry point and X10 technology does the rest. The instant either sensor detects movement and heat, it sends a radio frequency signal right through the walls to the Bruiser up to 100' away. Add switches/receivers (p. 11) or lamp dimmers (below), and those fixtures will light five seconds after the barking starts, just as if someone were up and investigating.

For additional security, you can also turn the



Using X10 technology, this wireless system gives you the benefits of owning a deadly guard dog, with none of the hassles.

barking and the lights on or off from your remote.

### Bruiser, the Barking Dog Alarm System

Includes barking dog alarm with volume control, two outdoor motion sensors, and one two-button keychain remote. Dog requires AC outlet and 9 "C" batteries (not included) for backup in case of a power failure.

Part No.	Price
<b>235969EF</b> Bruiser Alarm System.....	\$139.99

## Bruiser Accessories

Customize your Bruiser Alarm System with these compatible accessories.

*Note: The Bruiser sensors and remotes are not interchangeable with those used by the Home Security Alarm System.*

### Lamp Dimmer/Receiver

Allows you to control (on/off/dim) lamps manually or remotely. Plug controller into wall outlet; plug lamp into controller. 300W max.



Part No.	1	4	8
<b>236591EF</b>	\$14.99	\$14.24	\$13.53

### Bruiser Outdoor Motion Sensor

Requires 4 AA batteries (not included).



Part No.	1	4	8
<b>236806EF</b>	\$29.99	\$28.49	\$26.99

### Bruiser Keychain Remote

2-button remote controls barking dog and one other device.



Part No.	1	4	8
<b>236558EF</b>	\$19.99	\$18.99	\$17.99

### Motion Sensor with 2 Floodlights

Mounts outside under eaves. Turns on floodlights and selected indoor lights when motion is detected or at dusk. Can trigger barking if desired.



Part No.	1	4	8
<b>236611EF</b>	\$59.99	\$56.99	\$54.14

## Hi-value, low cost 5" monitor system goes anywhere, sees everything, even in low light!

Our convenient low-priced wireless A/V monitoring system easily extends the reach of your eyes and ears to keep watch over your home or business. Just plug it in and you are ready to go. Pick up the lightweight monitor with its convenient handle and use battery power while you keep tabs on your domain anywhere within receiving range. Slide the camera's power switch into the "night" position and the infra-red LEDs allow you to see in very low light. The built-in RCA jacks allow you to run the signals directly into your VCR for true 24/7 security. The set comes complete with one camera and monitor.

### Extra Eyes and Ears

Expand your video security system with up to three of our versatile add-on cameras which



come complete with built-in transmitters. Rooms can be observed from a single monitor. Easily switch between cameras with a four-step, 3 to 10 second auto-switching control. The camera's wide field of vision and flexible tilt-and-swivel mount make these black & white cameras a perfect addition to your monitoring set-up. Reliable 2.4 GHz technology transmits clear video and audio to your receiver and monitor.

### Monitor Receiver Specifications:

- 5" black & white CRT screen with contrast, volume, and brightness controls
- Frequency: 2400-2483 MHz
- Sensitivity: -80 to ~ -85dBm
- Video output: 1Vpp, 75Ω
- Audio output: -8dBs, 47kΩ
- Horizontal resolution: 330 lines
- Automatic camera switching

**Requirements:** 12VDC @ 1A power supply (included) or 10 C size batteries (P/N 198723EF not included)

### Camera Specifications:

- Transmit frequency: 2400-2483 MHz
- Modulation: FM
- Max frequency deviation: 20MHz
- Audio sub carrier frequency: 6.0-6.5 MHz
- Usable range: 50-100 meters
- Infrared detection range: 1-2 meters

**Requirements:** 12VDC @ 300mA power supply (included)

Part No.	Description	Price
<b>235045EF</b>	5" B&W Monitor & Camera .....	<b>\$169.95</b>
<b>235053EF</b>	Additional Camera & Transmitter .....	<b>\$89.95</b>
<b>198723EF</b>	Alkaline Batteries "C" .....	<b>\$1.09</b>

## Black & White CCD Camera with 6" Monitor

### Camera: EIA Format

- 512(H) x 492(V)
- 1/3" CCD image sensor
- 380 TV line resolution
- 6 IR LED light for view in the dark application
- 15.734kHz horizontal synch. frequency
- 2:1 interlace scanning system
- 1/100,000 second electronic shutter
- 3.6mm lens with F2.0 • S/N ratio: 48dB
- Video output: 1Vp-p, 75Ω
- Audio output: 2Vp-p, 50Ω maximum • 0 lux at 2M
- BNC connector for video & RCA connector for audio
- Power supply: 12-15V @ 130mA • FOV: 92°
- Size: 2.2"W x 2.8"D x 2.1"H

**Includes:** Camera bracket

### Monitor: EIA Format

- 6" 2-channel flat screen monochrome monitor
- Vertical hold, brightness and contrast adjustment knobs at rear of monitor
- Size: 6.7"W x 7.2"D x 5.2"H • Weight: 7.7 lbs.

**Includes:** 20M audio/video cable, manual and 15V @ 1A center positive power supply

Part No.	Description	1	10
<b>170616EF</b>	Camera w/ monitor .....	<b>\$159.95</b>	<b>\$143.95</b>

## 5.6" Color TFT Monitor

### NTSC Format

- TFT color LCD display
- 224,640 pixel display resolution
- Built-in 1 watt speaker
- Brightness, color and volume adjustments
- Video input: 1.0Vp-p; 75Ω
- Audio input: 2Vp-p; 2kΩ
- Size: 6.1"W x 4.8"H x 1.2"D • Weight: 2.6 lbs.

**Includes:** RCA cable, mounting stand with hardware and 12VDC @ 500mA power supply

Part No.	Description	1	10
<b>201702EF</b>	5.6" TFT color monitor .....	<b>\$279.95</b>	<b>\$259.95</b>

## 14" SVGA Color Monitor

- 13" diagonal view
- 0.28mm dot pitch
- HDDB15 male connector
- Power, contrast, brightness, horizontal and vertical position, recall and trapezoid knob adjustments
- Resolution: 1280 x 1024 @ 60Hz
- Input voltage: 100-240VAC @ 50-60Hz
- Size: 14.2"W x 14.6"D x 13.5"H
- Weight: 25 lbs.
- Refurbished (mfr. may vary)

**Requirements:** IBM PC/XT or higher compatible

**Includes:** Power cable, tilt and swivel base

Part No.	Description	1	10
<b>174537EF</b>	13" diagonal view .....	<b>\$69.99</b>	<b>\$64.99</b>

## 10" Black & White Security Monitor with Audio

- EIA format
- 9" viewable screen
- Resolution: 700 line
- Push down front panel for vertical size, brightness, volume, and contrast adjustments, power switch
- Horizontal frequency, focus and sub-brightness adjustment, impedance input switch, 1 BNC female & 1 RCA jack for audio/video input/output
- Input voltage: 120VAC @ 60Hz (2-prong 5" cable)
- Size: 9.3"W x 12"D x 9.1"H • Weight: 15 lbs.

**Includes:** Manual

Part No.	Description	1	10
<b>192719EF</b>	10" black & white monitor ..	<b>\$119.95</b>	<b>\$95.95</b>

**Over 99% of our products are in stock!**

**Place your order by 6PM EST for same business day shipment.**

## 4" TFT LCD Monitor

### NTSC Format

- TFT color LCD
- Resolution: 234 x 383dpi
- Backlight: cold cathode fluorescent lamp
- Power source: 12VDC @ 400mA
- 5" long lead wire with 4 position molex type power connector
- Tint color and brightness adjustable
- Size: 4.1"L x 3.3"W x 0.7"H (display)
- Size: 4.7"L x 3.3"W x 1.3"H (unit) • Weight: 0.7 lbs.

Part No.	Description	1	10
<b>172742EF</b>	4" color LCD monitor .....	<b>\$159.95</b>	<b>\$149.95</b>

## 2.4GHz Wireless Fully Automatic Color CCD Camera

### With AES/AI Video Drive

- Auto electronic shutter (AES): 1 to 1/100,000 sec.
- Auto iris (AI) control video drive switchable
- Color; NTSC format; 2.0 lux/F1.2
- 380 TV line resolution
- S/N ratio: more than 48dB
- Scanning system: 2:1 interlace
- 1/3" CCD interline sensor
- 512(H) x 492(V)
- Video output: 1Vp-p / 75Ω
- Impedance output: 75Ω typical
- LED power "ON" indicator at rear panel
- Size: 4.0"L x 2.2"W x 2.0"H
- Weight: 2.1 lbs.

**Includes:** 15VDC power supply, antenna, mounting bracket and manual

**208645EF:** Auto Iris Lens

- Auto iris direct drive
- FOV: 46° • Aperture: ±4F = 1.4 ~ 64
- Use with receivers 169631EF or 192866EF (pg 15)

Part No.	Description	1	10
<b>174810EF</b>	Color camera Was <del>\$349.95</del> .....	<b>\$219.95</b>	<b>\$195.95</b>
<b>208645EF</b>	Auto Iris lens .....	<b>69.95</b>	<b>62.95</b>



## 4-Channel 2.4GHz Wireless Audio/Video Receiver and 10mW Transmitter

**Make your camera wireless up to 492 feet!**

- Transmission range: 492' (150M outdoors); 164' (50M indoors)
- 4-channel switch selectable on transmitter
- Output power (transmitter): 10mW
- Output impedance: 50Ω typical
- Video input: 1Vp-p composite
- Audio input: 2Vp-p max.
- RCA jacks for audio and video connectors



192858EF

### Receiver:

- Video loss detection and freeze channel
- Non-volatile memory protects system set-up from power loss
- Mute and alarm trigger port
- Size: (transmitter) 4.5"L x 3.2"W x 1.0"H
- Size: (receiver) 6.5"L x 5.5"W x 1.4"H
- Weight: 1.8 lbs.



192866EF

**Includes:** RCA cable, 12VDC@500mA adapter, RCA to F connector adapter (receiver unit only)

Part No.	Description	1	10
192858EF	4-channel transmitter .....	\$89.95	\$79.95
192866EF	4-channel receiver .....	124.95	112.95

## 4-Channel 2.4GHz Wireless Audio/Video Transmitter System

**CCIR NTSC, PAL, EIA Format**

- ISM band: 2.4-2.483GHz
- Four selectable channel transmitter and receiver
- Audio response: 20Hz-20kHz
- Antenna mode: dipole (omnidirectional)
- Video output: 1V p-p/75Ω composite video
- RCA jacks for audio/video connectors • Wt.: 3.3 lbs.



**Includes:** Two 12VDC @ 500mA w/ 2.1mm x 5.5mm center positive plug, and patch cables

**Transmitter:** Size: 3.5"L x 2.5"W x 1.1"H

**Receiver:** Size: 5.1"L x 4.0"W x 1.0"H

Part No.	Description	1	10
169631EF	4-ch. wireless system .....	\$149.95	\$134.95

## 2.4GHz Wireless Antenna Booster

**Extend Video Transmitting Distance**

- Output power: 700mW (±10%)
- Input power: 10mW - 60mW
- Consumption 350mA
- Impedance output: 50Ω typical (to antenna)
- Frequency: 2400 - 2500
- Size: 2.2"L x 2.0"W x 0.8"H



215175EF

**Includes:** 9VDC @ 800mA power supply

Part No.	Description	1	10
215175EF	Antenna booster .....	\$199.95	\$179.95
179872EF	Wireless extension cable .....	10.99	9.89

## 2.4GHz SMA RF Antenna

- For use with 2.4GHz cameras, transmitters, and receivers
- Gain: 3dB • SMA male • Size: 3.6"L

Part No.	Description	1	10
179864EF	2.4GHz antenna .....	\$15.95	\$14.35

## Color Camera Board

**NTSC Format**

- 5.0 lux
- FOV: 92°
- 330 TV lines
- 3.6mm lens/F2.0
- 1/3" CCD image sensor
- Low power consumption
- Automatic exposure, gain and white balance
- Size: 1.0"L x 0.9"W x 1.1"H



Part No.	Description	1	10
171011EF	Camera board .....	\$73.95	\$66.59

**SONY®**

## Black & White Low-Light Camera

**Sony Chipset**

- Signal to noise ratio: >48dB
- Requires 12V power source (not included)
- 6" wires with 4-pin Molex-type keyed connector
- EIA system 537(H) x 505(V)
- Composite output with 420 line resolution • Lens: 3.6mm
- Shutter speed: 1/60 - 1/1000 • FOV: 92.6°
- Video output: 1.0Vpp composite video/75Ω
- Size: 1.3"L x 1.3"W x 1.0"H • One-year warranty



150931EF

Part No.	Description	1	10	25
150931EF	Camera board .....	\$89.95	\$80.95	\$71.95
159071EF	8mm lens 38.6" <del>\$24.95</del>	17.95	17.10	16.25

## Black & White Camera

**EIA Format**

- 510(H) x 492(V)
- S/N ratio: 46dB
- 1/3" CCD image sensor
- Horizontal resolution: >350 lines
- Scanning system: 2:1 interlace
- Sensitivity: 0.7 lux/F2.0
- Video output: 1Vp-p, composite video 75Ω
- Power supply: 12VDC (recommend P/N 162996EF, see web) • Size: 1.3"L x 1.3"W x 1.2"H
- Power consumption: 110mA • FOV: 92°
- Electronic shutter: 1/125,000 sec. (linear)



Part No.	Description	1	10
171029EF	Camera board .....	\$47.95	\$42.95

**SONY®**

## Color CCD Camera

**Sony Chipset**

- 1/4" Sony super HAD CCD sensor
- NTSC system with 510(H) x 492(V)
- Furnished mini lens: 3.6mm
- Minimum illumination: 0.5 lux @ F2.0
- Signal to noise ratio: >48dB • 330 TV lines
- Supports these functions: auto electronic shutter (AES), auto iris control (AIC), auto gain control (AGC), auto white balance (AWB), back light compensation (BLC) and flicker less (FL)
- Video drive iris control; high/low switchable auto gain control; on/off backlight compensation
- Internal, negative synchronous system
- Video output: 1Vp-p; 75Ω



**Requires:** 12VDC @ 120mA power supply (recommend P/N 100095EF, see web)

**Includes:** Power/signal cable & mounting hardware

Part No.	Description	1	10
213436EF	Enclosed color camera .....	\$179.95	\$161.95

**More Products @ [www.Jameco.com](http://www.Jameco.com)**

**Compared to the size of a quarter!**



## A mini-camera that's half the size of a pack of gum.

**With low power demand and its tiny size you can build this camera into almost anything.**

This mini-camera is perfect for hobbyists and educators for experimentation or for anywhere you want to add video to your project. With its high resolution (525 lines) and low light sensitivity (0.2 lux) it is well suited for the study of optics in the classroom. The camera does not come with a lens, but you can easily adapt standard lens or use the optics of a telescope, microscope, etc. to bring video to your project.

- Resolution: 380 TV lines • Imager: 3/8" CCD
- Scanning: 525 lines interlaced (EIA); 625 lines interlaced (CCIR) • Light sensitivity: 0.2 lux
- Video output: 1Vp-p / 75Ω
- Iris control: CCD with electronic shutter control (1/100,000 sec. Max.)
- Signal to noise ratio: 45dB or more
- Power: 9.0V to 14.5V, 1.2W

Part No.	Description	Price
226237EF	Mini B&W Camera .....	\$14.95

## Mini Enclosed Color NTSC Camera

- 1/4" CCD sensor
- 350 horizontal TV lines
- 1 lux/F2.0
- Electronic shutter: up to 1/120,000 sec.
- NTSC system with 512(H) x 492(V)
- Scanning system: 2:1 interlace
- Signal to noise ratio: 48dB • Lens: 3.7mm/F2.0
- Video output: 1Vp-p, 75Ω • FOV: 92°
- Size: (enclosure) 1.3"L x 1.1"W x 0.9"D



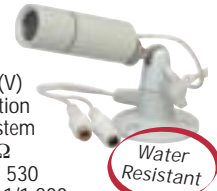
**Requires:** 9VDC - 12VDC @ 500mA power supply (recommend P/N 100853EF, pg 37)

**Includes:** BNC/Power cable and mounting hardware

Part No.	Description	1	10
215423EF	Mini enclosed camera .....	\$129.95	\$119.95

## Color Interline Camera

- EIA format
- 5 lux sensitivity
- 1/3" CMOS image sensor
- EIA format: 512(H) x 492(V)
- 330 horizontal line resolution
- 2:1 scanning interlace system
- Video output: 1V p-p; 75Ω
- S/N ratio: 40dB • FOV: 530
- Electronic shutter: 1/60 - 1/1,200 sec.
- Adjustable mounting bracket • 6mm lens/F2.0
- Connectors: 1 standard RCA female jack for video, and in-line 2.1mm power-plug connector for power supply • Size: 2.6"L x 0.9"Dia.



**Includes:** Adjustable mounting bracket, instruction sheet and 9V @ 100mA power supply

Part No.	Description	1	10
185017EF	Color camera .....	\$99.95	\$89.95

## Color Camera with Audio Microphone

### NTSC Format

- Pick-up device: 1/4" CCD image sensor
- FOV: 92°
- Picture elements: 512(H) x 492(V) lines
- 330 TV line resolution
- Minimum illumination: 2 lux
- Horizontal sync. frequency: 15.734kHz
- Vertical frequency: 60Hz
- Scanning system: 2:1 interlace
- Video output: 1V p-p, 75Ω
- Audio output: 2V p-p max.
- Lens: 3.8mm/F2.0
- Size: 2.9"L x 2.1"W x 2.0"H • Weight: 0.3 lbs.


**SALE**

**Requires:** 12V regulated power supply (recommend P/N 162996EF, see website)

Part No.	Description	1	10
169404EF	Enclosed with audio	<del>\$149.95</del> \$119.95	\$109.95

## Color and B&W Cameras

- 1/3" Panasonic CCD image sensor
- Image size: 4.82mm (H) x 3.64mm (V)
- More than 380TV lines horizontal resolution
- 15.734kHz synchronous frequency
- Scanning system: 2:1 interlace
- S/N ratio: more than 46dB • FOV: 42.6°
- BNC connector for video
- Video output: 1Vp-p; 75Ω
- Size: 4.0"L x 2.2"W x 2.0"H • Weight: 0.9 lbs.
- 171256EF: B&W • 0.3 lux
- 512(H) x 492(V) EIA signal format
- Auto iris: DC driver / AES / video driver switchable
- 171248EF: Color • 1.0 lux / F1.4
- 512(H) x 492(V) NTSC signal format
- Auto iris: DC driver / video driver switchable



171248EF

**Requires:** 12VDC @ 140mA power supply (recommend P/N 162996EF, see web)

- 208645EF: Auto Iris Lens
- Auto iris direct drive
  - FOV: 46° • Aperture: ±4F = 1.4 ~ 64

Part No.	Description	1	10
171256EF	B&W CCD camera	\$109.95	\$99.95
171248EF	Color CCD camera	224.95	201.95
208645EF	Auto Iris lens	69.95	62.95

## Night Vision Infrared Lighted Camera

### EIA Format

- Adjustable camera lens
- Auto iris controlled
- Built-in voltage regulator
- Horizontal sync. frequency: 15.734kHz
- 6 infrared LEDs for night vision
- Scanning system: 2:1 interlace
- Video output: 1Vp-p; 75Ω
- Audio output: 2Vp-p max.
- 380 TV line resolution
- FOV: 92° • 0.1 lux with F2.0 • Lens: 3.6mm
- Matching conn.: RG59 BNC (P/N 71271EF, pg 87)
- Size: 2.9"L x 2.0"W x 2.0"H • Weight: 1.2 lbs.



**Includes:** 12VDC @ 500mA power supply and wall mounting bracket

Part No.	Description	1	10
150404EF	Infrared camera	Was <del>\$124.95</del> \$119.95	\$109.95

## Greater security & peace of mind,

Your own full-color indoor video monitoring/ security system is only seconds away!

The compact, wall-mountable camera transmits up to 150 feet on the reliable 2.4 GHz band for clear, convenient viewing on a standard TV or VCR.

Set up is quick and easy. Simply mount the camera, choose day or night mode, adjust the manual focus, and apply power from the included A/C adaptor. Then choose

a convenient spot for your monitoring station, hook up your TV or VCR, and you're ready to go. Plus, the expandable FM receiver comes ready to monitor up to 4 locations, by simply installing additional cameras. Complete monitoring package includes camera, receiver, remote control, power adapters and RCA cables.

Part No.	Description	Price
233375EF	2.4GHz Wireless Camera	\$79.99


**NEW**

**Quick and easy set up at a fabulous price, it's the ideal solution for security monitoring.**

- Output level: 1Vp-p
- Power requirements: 8VDC @ 400mA
- Weight: 3.0 lbs.
- Wireless Receiver:**
- Size: 4.1"W x 2.9"D x 1.0"H
- Wireless Camera:**
- Operating frequency: 2.414 to 2.468GHz
- FM audio/video modulation
- Video input level & impedance: 1Vp-p, 75Ω
- Audio input level & impedance: 1Vp-p, 600Ω
- Illumination: 0.5 lux
- Size: 5.5"W x 4.7"D x 4.7"H

## USB Color Video Camera

- Plug & Play compatible
- Sensor: 1/3" CMOS
- 640 (H) x 480 (V) pixels
- Minimum illumination: less than 15 lux
- Integrated lens: F2.0
- Resolution and output performance: VGA (640 x 480) up to 10 frames per second
- Size: 3.6"L x 2.1"W x 2.0"H
- Weight: 0.4 lbs.


**SALE**

**System requirements:** Pentium® 166MHz, 16MB of RAM, Windows® 98, USB port

**Includes:** CD-ROM drivers

Part No.	Description	1	10
204134EF	USB color camera	<del>\$49.95</del> \$22.25	\$20.25

## Mini Dome Color Camera

### NTSC Format

- Perfect for ceilings
- 1/4" CCD image sensor
- 512(H) x 492(V)
- 330 horizontal line res.
- S/N ratio: 46dB
- 15.73kHz horizontal synch. frequency
- Scanning system: 2:1 interlace
- Up to 1/96,000 second electronic shutter
- 3.6mm lens with F2.0 • Video output: 1Vp-p, 75Ω
- Power supply: 12VDC @ 160mA (recommend P/N 162996EF, see web) • 2 lux/F2.0
- FOV: 92° • Size: 3.5"Dia. x 2.3"H



**Includes:** Mounting hardware

Part No.	Description	1	10
171037EF	Mini-dome camera	\$139.95	\$125.95

## Monitor/TV Wall Mount Brackets

- 95° swivel • Fits monitors and TVs 12"-18" • Supports up to 66 lbs.
- Wall mount screws not included • Assembly required
- Requires unit base to be mounted securely to wall stud

Part No.	Description	Weight	1	10
181817EF	TV wall mount	9.0 lbs.	Was <del>\$32.95</del> \$29.95	\$27.95



## PANAVISE

## 12 Version Camera Mounting Kit

A unique component system allows you to build one of twelve versions for today's smaller cameras. Quality ball housing provides 120° tilt and 360° camera rotation. Shafts are 1/2" dia. Vinyl cover adds a finished and professional look.

- Wall ceiling and T-Bar clip mounting
- Shafts: 2" (50.8mm), 4" (101.6mm) or 6" (152.4mm) long
- Knob & set screw adjustment CCTV mounts

Part No.	Product No.	Description	Price
224354EF	845-246	CCTV mounting kit	\$16.95
224389EF	860	Tri-foot base	7.49
224371EF	861	Square base	6.29
224362EF	862W	J-Box plate	8.95





## Mounting Brackets for Enclosed Camera

- Material: plastic
- Base mounted w/ 3 screws
- Swivel angle: 360°
- Tilt angle: 90°
- For use w/ enclosed cameras (P/Ns 150404EF and 169404EF, pg 16)

**SALE**


171002EF

- 171002EF:  
• Color: ivory • Max load: 11 lbs.
- 170982EF:  
• Color: white • Max load: 6.6 lbs.

Part No.	Mfr. Cross Ref. No.	Ht.	1	10
171002EF	15-B002L	6.4"	\$6.49	\$5.49
170982EF	15-B004	2.0"	8.49	7.65

## Mini Indoor Pan & Tilt Mechanism

### Continuous Pan

- Automatic scanning: 0° – 355° angular travel; pan clockwise and counter-clockwise
- Manual tilt: 0° - 90°
- Pan speed: 5"/sec.
- Maximum load: 4.4 lbs.
- Power consumption: 1 Watt
- Size: 2.5"Dia. x 2.4" H
- Weight: 0.4 lbs.
- Warranty: 2 years continuous use

Camera not included

**Includes:** 24V @ 150mA power supply, wall mount bracket and mounting hardware

Part No.	Description	1	10
215407EF	Mini pan/tilt	\$49.95	\$44.95

## Indoor Pan/Tilt Mechanism

### Continuous Pan

- Angular travel pan: 355°
- Angular travel tilt: ±60° (up/down)
- Input voltage: 115VAC
- Externally adjustable limited switch
- Pan speed: 6"/sec.
- Tilt speed: 3"/sec.
- Maximum load: 11 lbs.
- Weight: 4.6 lbs.
- Size: (overall) 6.2"W x 5.4"D x 7.5"H

Part No.	Description	1	10
179899EF	Pan/tilt mechanism	\$199.95	\$179.95

## Outdoor Metal Camera Enclosures

- Plate glass: 3mm thick
- Outdoor use
- 170931EF: without heater
- Clear window area: 2.5"W x 2.3"H
- Max. camera size: 4.0"L x 2.4"W x 2.4"H
- Size: 16.0"L x 4.9"W x 4.9"H • Weight: 2.8 lbs.
- 170940EF: w/ heater (keeps optics from fogging)
- Clear window area: 3.5"W x 3.1"H
- Max. camera size: 6.5"L x 3.2"W x 3.2"H
- Size: 11.0"L x 3.6"W x 3.6"H • Weight: 6.8 lbs.

Part No.	Description	1	10
170931EF	Camera housing	\$29.95	\$26.95
170940EF	Camera housing w/ heater	69.95	62.95



Look through our catalog for our latest Jameco @ Home Products

## Mount your video camera almost anywhere. It's a snap.

*As steady as a tripod but a lot handier, the Window Camera Mount lets you anchor that video camera to any glass surface at any height.*



Strong lever action suction cup mounts easily to any window as shown above with heavy police cam.



you're ready to shoot hands-free. It's perfect for temporary surveillance of your home or business. Doing field research or traveling? Mount your camera on the passenger window of your car and narrate as you drive with both hands on the wheel. Capture wildlife in your yard, your kids in the bathtub, and much more. For cameras up to 3 lbs.

Part No.	Description	Price
222746EF	Window Camera Mount	\$39.95

## Video Text Display Module

### NTSC composite (1Vp-p, 75Ω)

- Serial data input: 2400-19.2kbps
- 30-pin SIMM form factor (socket supplied)
- Compatible with Parallax Basic Stamp®, see pg 102
- Auto-switching genlock overlay or internal video generation
- Power supply: +8-16VDC @ 65mA input, 5VDC aux. output (regulated)
- Displays up to 308 characters (11 lines of 28)
- 12 x 18 pixel character pattern
- Asynchronous serial input only @ 9600bps
- Size: 3.5"L x 1.1"H



Part No.	Mfr. Cross Ref. No.	1	10	25
162051EF	BOBII Was \$29.95	\$69.95	\$62.95	\$56.65

## SMK RF Modulator

- Output frequency: NTSC Ch. 3/4, switch selectable
- Operating voltage: 12V @ 50mA max. • 12VDC RF modulator
- RF output impedance: 75Ω (F-type connector)
- Video modulation: 1.0V p-p • Audio FM deviation: 1.4V p-p
- PC connections: solder tab connectors • MFG. #: WMN2144-01

Part No.	Description	Size	1	10	50	100
141639EF	RF modulator	1.7"L x 1.7"W x 0.7"H	\$4.95	\$4.49	\$3.59	\$2.65

**SALE**


## Total control of your remote devices, anywhere in your house!


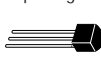




Extend the power of your favorite remotes (beyond line-of-sight!) with this innovative, no-fuss solution. This ingenious device slips into the AA battery compartment of your existing infrared remote and allows you to control your electronics from rooms away. Infrared signals are converted to RF, and a compact receiver unit in the room with your electronics sends the commands to your system. And this new level of control is as easy as changing a battery in your remote!

Part No.	Description	Price
235512EF	IR to RF Remote Extender	\$69.95

Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

 TO-3 package 4-pin	 TO-92 package 3-pin	 TO-220 package 3 or 5-pin	 DIP package 8, 14, 16 and 18-pin
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## Linear Series

131 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pkg.	Description	1	10	100
120723EF	LM12CLK	TO-3/4	80W op. amp. ....	\$20.99	\$19.99	\$18.99
107094EF	LM34CZ	TO-92	Prec. F temp. sensor (-40F to +230F) <del>\$5.95</del>	5.49	4.49	4.39
107107EF	LM35CZ	TO-92	Prec. C temp. sensor (-40°C to 110°C) ....	5.79	4.39	3.19
33195EF	TL072CP*	DIP-8	Low noise JFET dual op. amp. ....	.28	.25	.20
33216EF	TL074CN*	DIP-14	Low noise JFET quad op. amp. ....	.47	.39	.35
33267EF	TL084CN*	DIP-14	JFET-ipt quad op. amp. ....	.49	.44	.39
23392EF	LM301N*	DIP-14	Improved op. amp. ....	.39	.35	.29
23464EF	LM308N*	DIP-8	Precision op. amp. ....	4.49	3.99	3.49
23528EF	LM311N*	DIP-8	Voltage comparator ....	.35	.25	.19
23608EF	LM318N	DIP-8	Precision hi-speed op. amp. ....	.59	.52	.45
23632EF	LM319N	DIP-14	Hi-speed dual comparator ....	.45	.40	.31
23683EF	LM324N**	DIP-14	Low power quad op. amp. (ULN4336) ....	.26	.24	.21
23721EF	LM331N	DIP-8	Prec. volt-freq. converter(150ppm/°C) <del>\$2.95</del>	2.55	1.99	1.45
23851EF	LM339N**	DIP-14	Quad comparator ....	.25	.23	.21
23966EF	LM358N*	DIP-8	Low power dual op. amp. .... Was <del>\$0.29</del>	*	.18	.13
24088EF	LM383T	TO-220/5	7-watt audio high power amp. ....	5.95	5.39	4.95
24281EF	LM393N*	DIP-8	Dual comparator ....	.29	.24	.19
23000EF	LF398N	DIP-8	Sample and hold circuit .... Was <del>\$1.69</del>	1.59	1.45	1.15
23026EF	LF412CN*	DIP-8	Low offset drift JFET input dual op. amp. ....	1.35	1.19	.99
27422EF	LM555CN**	DIP-8	Timer (MC1455P/NE555V) ....	.29	.25	.19
126797EF	LMC555CN*	DIP-8	CMOS 555 timer ....	.54	.49	.44
24328EF	LM556N*	DIP-14	Dual 555 timer (MC3456P) ....	.49	.45	.39
24352EF	LM565N	DIP-14	Phased locked loop ....	1.49	1.29	1.19
24395EF	LM567V	DIP-8	Tone decoder ....	.49	.40	.37
27490EF	NE571N	DIP-16	Comander, subscriber ....	3.29	2.99	2.69
24539EF	LM741CN**	DIP-8	OP. amp. (ULN2151) ....	.29	.25	.19
24563EF	LM747CN	DIP-14	Dual 741 op. amp. ....	3.99	3.49	2.99
23131EF	LM1458N*	DIP-8	Dual op. amp. (RC4558) ....	.29	.26	.20
23157EF	LM1488N*	DIP-14	Quad line driver RS232 (75188) ....	.29	.25	.22
23181EF	LM1489N*	DIP-14	Quad line rec. RS232 (75189) ....	.29	.20	.18
23270EF	LM1875T	TO-220/5	20-watt power audio amp. ....	1.95	1.55	1.25
107140EF	LM1881N	DIP-8	Video synchronous separator ....	2.49	1.99	1.49
34278EF	ULN2003A*	DIP-16	Hi-volt/curr. darl. transistor array ....	.39	.35	.29
156566EF	LM2574N-5	DIP-8	Step-down 5-voltage regulator ....	1.49	1.29	1.09
39589EF	26LS31	DIP-16	Quad diff line driver ....	.79	.69	.62
39600EF	26LS32	DIP-16	Quad diff line receiver ....	.59	.50	.39
34315EF	ULN2803A*	DIP-18	Hi-volt. hi-curr. darl. transis. array ....	.69	.59	.49
23296EF	LM2901N	DIP-14	Quad comp. ....	.25	.19	.15
23350EF	LM2917N-8	DIP-8	Frequency to volt converter ....	2.45	1.75	1.25
107182EF	LM2940CT-5	TO-220/3	5V low dropout reg. (max. 45Vin) ....	1.29	1.19	1.09
12183EF	CA3130E	DIP-8	CMOS op. amp. .... Was <del>\$1.29</del>	.79	.75	.69
12204EF	CA3140E	DIP-8	Bi-MOS op. amp. ....	.72	.65	.54
12239EF	CA3161E	DIP-16	BCD to 7-segment decoder driver ....	2.19	1.95	1.75
24168EF	CA3401N	DIP-14	Quad amp (LM3900N) (221-235) ....	.79	.69	.62
24230EF	LM3914N	DIP-18	Bar-graph display driver ....	2.25	2.02	1.82
24256EF	LM3915N	DIP-18	3 dB steps bar-graph disp. driver ....	2.49	1.99	1.55
27385EF	NE5532*	DIP-8	Dual low noise op. amp. .... Was <del>\$0.69</del>	.49	.43	.39
51879EF	8038CCPD	DIP-14	Precision wave form generator ....	3.19	2.49	2.39
50964EF	75176	DIP-8	Differential bus transceiver ....	.65	.55	.45
51131EF	75492	DIP-14	Hex digit driver (492) ....	3.29	3.19	2.99

\*10 pieces in Linear kit, below \*\*20 pieces in Linear kit, below \* 10 piece minimum

## Linear Series IC Cabinet Kit



Get a total of 480 pieces comprised of 40 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.



Part No	Description	See page 39 for kit details	1	10
84988EF	480 pcs. Linear IC cabinet kit (some of 40 types noted by */**)		\$189.95	\$169.95



## Analog Devices

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Product No.	Pins	Description	1	10	50
115158EF	AD558JN	16	Microprocessor compat. 8-bit DAC ....	<del>\$17.99</del>	\$12.75	\$11.49
115174EF	AD620AN	8	Low cost instrument amplifier .....	17.95	15.95	14.35
115182EF	AD633JN	8	Low cost analog multiplier Was <del>\$12.95</del>	7.95	7.55	7.15

## Maxim-Type Interface Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
142535EF	MAX202CPE	16	+5V RS232 trans. requires 0.1µF caps .....	\$2.49	\$2.25	\$2.05
24811EF	MAX232CPE	16	+5V powered, dual RS232 transmitter/ receiver (0°C to +70°C) .....	2.19	1.75	1.45
106147EF	MAX232CWE*	16	+5V powered, dual RS232 (SOIC) trans./rcvr. ....	1.95	1.75	1.59
106155EF	MAX232EPE	16	+5V powered, dual RS232 transmitter/receiver (-40°C to +85°C) .....	2.49	2.25	2.05
106163EF	MAX233CPP	20	+5V powered, multichannel RS232 drivers/receivers (no ext. components) .....	5.75	5.18	4.66
106171EF	MAX235CPG	24	+5V powered, five RS232 transmitter/ receiver (no ext. components) .....	9.95	8.95	7.85

\* Surface mount

## 7400 Series

59 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
48979EF	7400**	14	Quad 2-input NAND gate .....	\$ .65	\$ .55	\$ .45
49015EF	7402*	14	Quad 2-input NOR gate .....	.59	.49	.45
49120EF	7407**	14	Hex buffer/driver (O.C.) .... Was <del>\$0.89</del>	.35	.32	.28
49146EF	7408*	14	Quad 2-input AND gate .....	.79	.55	.45
49728EF	7417*	14	Hex buffer/driver (O.C. hi-voltage) .....	.79	.67	.50
50593EF	7476	16	Dual JK flip-flop with preset & clear <del>\$1.79</del>	.89	.73	.59
50631EF	7483	16	4-bit binary full adder .....	.89	.79	.69
50745EF	7493	14	4-bit binary counter ....	1.49	1.34	1.19
49883EF	74189	16	64-bit RAM tri-state (DM8599N) .....	3.99	3.39	2.55
49912EF	74192	16	Decade up/down counter with clear ....	3.69	3.39	3.19
88225EF	SDLD001A	—	Texas Instruments TTL Data Book .....	34.95	31.49	31.49

\*10 pieces included in 7400 kit below \*\*20 pieces included in 7400 kit below

## 7400 Series IC Cabinet Kit

Get a total of 350 pieces comprised of 30 different ICs and save big! Includes 20-drawer component cabinet with drawers and adhesive labels for labeling.




Part No.	Description	See page 38 for kit details	1	10
84953EF	350 pcs. 7400 series IC cabinet kit (some of 30 types noted by */**) ..		\$139.95	\$125.95

## 74C Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
44222EF	74C00	14	Quad 2-input NAND gate .....	\$ .79	\$ .59	\$ .41
44231EF	74C04	14	Hex inverter (CD4069) .....	.79	.59	.41
44564EF	74C922	18	16-key keyboard encoder (INS8245N) .....	6.29	5.05	4.26
44572EF	74C923	20	20-key keyboard encoder (INS8246N) <del>\$6.95</del>	5.99	4.95	4.09

## Voltage Regulators

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pkg.	Description	1	10	100
23579EF	LM317T**	TO-220/3	1.5A adj. pos. reg. (1.2V-37V) .....	\$ .49	\$ .44	\$ .39
23667EF	LM323K	TO-3/2	5V 3A positive reg. .... Was <del>\$2.95</del>	3.19	2.78	2.12
192284EF	LM338T	TO-220/3	5A adjustable regulator .....	1.99	1.49	.99
24467EF	LM723CN*	DIP-14	Voltage regulator (2V-37V) .....	.29	.26	.23
51182EF	78L05**	TO-92	5V 100mA pos. voltage regulator .....	.27	.24	.22
51203EF	78L12*	TO-92	12V 100mA pos. voltage regulator ....	.25	.21	.16
192233EF	78M05	TO-220/3	5V 500mA pos. voltage regulator .....	.35	.30	.22
192241EF	78M12	TO-220/3	12V 500mA pos. voltage regulator ....	.35	.32	.28
51262EF	7805T**	TO-220/3	5V 1A pos. voltage reg. (LM340T-5) ..	.35	.32	.28
51431EF	79L12	TO-92	12V 100mA neg. voltage regulator .....	.28	.25	.23
51457EF	7905T*	TO-220/3	5V 1A neg. voltage regulator .....	.39	.35	.29
51481EF	7912T*	TO-220/3	12V 1A neg. voltage regulator .....	.39	.35	.29

\*10 pieces in Linear kit, left \*\*20 pieces in Linear kit, left



Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

## 74LS Series

55 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
46252EF	74LS00**	14	Quad 2-input NAND gate	\$ .29	\$ .27	\$ .24
46287EF	74LS02**	14	Quad 2-input NOR gate	.29	.25	.21
46316EF	74LS04**	14	Hex inverter	.29	.26	.23
46341EF	74LS05*	14	Hex inverter (O.C.)	.34	.26	.18
46367EF	74LS07	14	Hex buffer/driver (O.C. hi-voltage)	<del>\$0.99</del> .84	.79	.74
46375EF	74LS08**	14	Quad 2-input AND gate	.36	.31	.22
46404EF	74LS10*	14	Triple 3-input NAND gate	<del>\$0.29</del> .21	.16	.11
46439EF	74LS11*	14	Triple 3-input AND gate	.31	.23	.16
46640EF	74LS14*	14	Hex inverter Schmitt trigger	.29	.25	.18
47095EF	74LS20*	14	Dual 4-input NAND gate .. Was <del>\$0.35</del>	.23	.18	.14
47458EF	74LS30*	14	8-input NAND gate	.29	.25	.18
47466EF	74LS32**	14	Quad 2-input OR gate	.29	.26	.23
47693EF	74LS38	14	Quad 2-input NAND gate buffer (O.C.)	.29	.25	.18
47790EF	74LS47*	16	BCD to 7-seg. decoder/driver (O.C.) <del>\$0.99</del>	.72	.52	.45
47992EF	74LS73*	14	Dual JK flip-flop with clear Was <del>\$0.49</del>	.36	.33	.27
48004EF	74LS74**	14	Dual D flip-flop	.29	.25	.22
48021EF	74LS75*	16	4-bit bi-stable latch	.55	.43	.35
48071EF	74LS85*	16	4-bit magnitude comparator	.39	.29	.25
48098EF	74LS86*	14	Quad EXCLUSIVE-OR gate	.35	.30	.22
48119EF	74LS90*	14	Decade counter	.49	.45	.39
48151EF	74LS93*	14	4-bit binary counter	.89	.79	.70
46480EF	74LS123*	16	Dual mono. multivibrator with clear	.33	.28	.21
46501EF	74LS125*	14	Quad bus buffer neg. enable tri-state	.39	.31	.23
46607EF	74LS138**	16	3 to 8 decoder/demultiplexer	.38	.35	.26
46623EF	74LS139*	16	2 to 4 decoder/demultiplexer	.36	.31	.23
46703EF	74LS151*	16	8-bit input multiplexer	.39	.35	.31
46738EF	74LS154	24	4 to 16 line decoder/demultiplexer	2.49	2.25	2.05
46754EF	74LS155*	16	Dual 2/4 demultiplexer	.39	.33	.25
46771EF	74LS157*	16	Quad 2/1 data selector	.29	.25	.18
46931EF	74LS174*	16	Hex D flip-flop with clear	.35	.28	.19
46957EF	74LS175*	16	Quad D flip-flop with clear	.35	.31	.27
47010EF	74LS192	16	Decade up/down counter with clear	3.95	3.59	3.25
47036EF	74LS193*	16	Binary up/down counter with clear	.59	.49	.45
47141EF	74LS240*	20	Octal invert. line driver tri-state	.44	.37	.28
47167EF	74LS241	20	Octal bus/line driver tri-state	.39	.33	.24
47183EF	74LS244*	20	Octal driver tri-state	.44	.37	.28
47212EF	74LS245*	20	Octal bus transceiver tri-state	.45	.39	.35
47386EF	74LS273*	20	Octal D-type flip-flop with clear	.39	.35	.29
47600EF	74LS373*	20	Octal D flip-flop tri-state	.45	.39	.35
47634EF	74LS374*	20	Octal D F/F edge-trig tri-state	.45	.39	.34
47669EF	74LS377	20	Octal D register common enable	.53	.45	.34
47722EF	74LS390	16	Dual 4-bit decade counter	.55	.47	.35
47861EF	74LS540	20	Octal invert. buffer/line driver tri-state ..	.69	.59	.44
47870EF	74LS541	20	Octal buffer/line driver tri-state	.69	.59	.49
64418EF	74LS573	20	Octal D-type F/F latch tri-state	1.65	1.45	.98
47984EF	74LS688	20	8-bit magnitude comparator	1.09	.89	.69

\*10 pieces in 74LS kit below

\*\*20 pieces in 74LS kit below

## 74LS Series IC Cabinet Kit



Get a total of 420 pieces comprised of 35 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.

SAVE \$45

Part No.	Description	See page 39 for kit details	1	10
84961EF	420 pc. 74LS series IC cabinet kit (some of 35 types noted by */**)		\$119.99	\$107.99

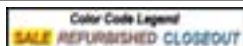
## IC Test Clip Series

- For temporary connections to DIP package components
- Heavy-duty spring loaded hinge provides positive contact
- 20 AWG insulated gold contacts
- Color: white

22103EF



Part No.	Cross Ref.	Description	1	10	25
22103EF	JTC16	16-pin (for 8, 14 and 16-pin ICs)	\$6.95	\$6.25	\$5.59
22120EF	JTC20	20-pin (for 18 and 20-pin ICs)	8.95	6.50	5.35
22162EF	JTC28	28-pin	10.95	9.95	8.95



## 74HC Series

41 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
45161EF	74HC00	14	Quad 2-input NAND gate (6231581)	\$ .29	\$ .19	\$ .14
45188EF	74HC02	14	Quad 2-input NOR gate	.29	.15	.10
45794EF	74HC32	14	Quad 2-input OR gate	.29	.24	.19
46130EF	74HC74	14	Dual D flip-flop	.35	.32	.29
45541EF	74HC192	16	Decade up/down counter with clear	1.59	1.45	1.29
45612EF	74HC240	20	Octal inverting line driver tri-state	.49	.39	.34
45655EF	74HC244	20	Octal driver tri-state	.45	.39	.29
45831EF	74HC373	20	Octal D-type flip-flop tri-state	.45	.39	.35
46050EF	74HC541	20	Octal buffer/line driver tri-state	.69	.55	.35
46084EF	74HC574	20	Octal D-type flip-flop tri-state	.59	.44	.31
46105EF	74HC595	16	8-bit serial-to-parallel shift reg. tri-state <del>\$0.99</del>	.62	.44	.39

## 74HCT Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

\* Prepackaged: order in increments of 10 or 100

Part No.	Cross Ref.	Pins	Description	1	10	100
44871EF	74HCT00	14	Quad 2-input NAND gate (Y560820T)	\$ .26	\$ .19	\$ .17
44898EF	74HCT04	14	Hex inverter	.24	.21	.18
44901EF	74HCT08	14	Quad 2-input AND gate	.26	.19	.17
44935EF	74HCT14	14	Hex inverter Schmitt trigger	.30	.22	.19
45057EF	74HCT32	14	Quad 2-input OR gate	.26	.19	.17
45137EF	74HCT74	14	Dual D flip-flop	Was <del>\$0.33</del>	* .12	.10
44927EF	74HCT138	16	3-to-8 decoder/demultiplexer	.34	.33	.31
63773EF	74HCT139	16	2-to-4 decoder/demultiplexer	.29	.25	.22
88057EF	74HCT154	24	4-to-16 decoder/demultiplexer	.99	.84	.71
45014EF	74HCT240	20	Octal inverting line driver tri-state	.49	.36	.31
45022EF	74HCT244	20	Octal driver tri-state	.39	.33	.24
45031EF	74HCT245	20	Octal transceiver tri-state	.39	.33	.25
45049EF	74HCT273	20	Octal D-type flip-flop with clear	.46	.37	.28
45065EF	74HCT373	20	Octal D-type flip-flop tri-state	.49	.36	.25
45073EF	74HCT374	20	Octal D-type flip-flop edge-trig. TS	.49	.36	.25
99303EF	74HCT541	20	Octal buffer/line driver tri-state	.69	.59	.39
45090EF	74HCT573	20	Octal D-type latched flip-flop tri-state	.69	.59	.42
45102EF	74HCT574	20	Octal D-type flip-flop edge-trigger tri-state	.69	.52	.36
45129EF	74HCT688	20	8-bit magnitude comparator	.69	.59	.49

## 4000 Series

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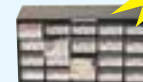
Part No.	Cross Ref.	Pins	Description	1	10	100
12562EF	CD4001**	14	Quad 2-input NOR gate	\$ .29	\$ .24	\$ .19
12634EF	CD4011**	14	Quad 2-input NAND gate	.29	.24	.19
12677EF	CD4013**	14	Dual D flip-flop with set/reset	.35	.25	.22
12706EF	CD4015*	16	Dual 4-stage static shift register	.39	.35	.29
12722EF	CD4016*	14	Quad bilateral switch	.29	.24	.19
12749EF	CD4017*	16	Decade counter/divider	.39	.35	.31
12802EF	CD4020*	16	14-stage binary/ripple counter	.49	.39	.29
12845EF	CD4023*	14	Triple 3-input NAND gate	.29	.25	.19
12853EF	CD4024*	14	7-stage binary counter	.35	.29	.19
12950EF	CD4040*	16	12-stage binary/ripple counter	.35	.29	.19
13055EF	CD4049**	16	HEX/buffer/converter (inverting)	.29	.24	.21
13071EF	CD4050*	16	Hex/buffer/converter (N-inverting)	.29	.25	.19
13098EF	CD4051*	16	Single 8-channel multi./demultiplexer	.45	.39	.35
13231EF	CD4069*	14	Hex inverter (74C04)	.29	.25	.19
13258EF	CD4070*	14	Quad EXCLUSIVE-OR gate (74C86)	.29	.26	.23
13354EF	CD4081*	14	Quad 2-input AND gate	.29	.25	.19
13493EF	CD4511*	16	BCD to 7-seg. latch/decoder/driver	.69	.59	.49
13581EF	CD4520	16	Dual binary up counter	.45	.35	.25
13653EF	CD4538*	16	Dual precision monostable multivibrator	.59	.49	.39
13709EF	CD4553	16	3-digit BCD counter	2.95	2.75	2.49

\*10 pieces in CD4000 kit below

\*\*20 pieces in CD4000 kit below

## 4000 Series IC Cabinet Kit

Get a total of 300 pieces comprised of 25 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.



SAVE \$30

Part No.	Description	See page 39 for kit details	1	10
84970EF	300 pc. CD4000 series IC cabinet kit (some of 25 types noted by */**)		\$79.95	\$71.95

Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

## EPROM

52 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
40002EF	2716	24	2k x 8 16kB 450ns (25V) .....	\$3.99	\$3.59	\$3.19
40011EF	2716-1	24	2k x 8 16kB 350ns (25V) .....	6.49	5.89	5.39
39706EF	27C16	24	2k x 8 16kB 450ns (25V) CMOS .....	7.25	6.55	5.99
40096EF	2732	24	4k x 8 32kB 450ns (25V) .....	6.49	5.49	4.10
40109EF	2732A-20	24	4k x 8 32kB 200ns (21V) .....	6.49	5.99	5.49
40192EF	2764-20	28	8k x 8 64kB 200ns (21V) .....	5.25	4.75	4.25
40248EF	2764A-25	28	8k x 8 64kB 250ns (12.5V) .....	3.49	3.15	2.85
105304EF	27C64-12	28	8k x 8 64kB 120ns (12.5V) CMOS .....	6.49	5.99	5.49
39829EF	27C64-15	28	8k x 8 64kB 150ns (12.5V) CMOS .....	5.49	4.99	4.49
74608EF	27C64-20	28	8k x 8 64kB 200ns (12.5V) CMOS .....	4.69	4.29	3.79
39933EF	27128-25	28	16k x 8 128kB 250ns (21V) .....	5.95	5.09	3.85
87935EF	27C128-12	28	16k x 8 128kB 120ns (12.5V) CMOS .....	4.49	3.99	3.59
39677EF	27C128-15	28	16k x 8 128kB 150ns (12.5V) CMOS .....	4.29	3.85	3.45
40037EF	27256-15	28	32k x 8 256kB 150ns (12.5V) .....	<del>\$5.49</del>	3.25	3.09 2.75
140476EF	27C256-70	28	32k x 8 256kB 70ns (12.5V) CMOS .....	<del>\$5.95</del>	3.59	3.39 3.09
112740EF	27C256-10	28	32k x 8 256kB 100ns (12.5V) CMOS .....	<del>\$5.75</del>	3.35	3.15 2.85
65904EF	27C256-12	28	32k x 8 256kB 120ns (12.5V) CMOS .....	<del>\$5.25</del>	3.25	3.15 2.79
39714EF	27C256-15	28	32k x 8 256kB 150ns (12.5V) CMOS .....	<del>\$4.95</del>	3.25	3.09 2.75
40168EF	27512-25	28	64k x 8 512kB 250ns (12.5V) .....	3.79	3.45	3.15
175206EF	27C512-90	28	64k x 8 512kB 90ns (12.5V) CMOS .....	<del>\$7.95</del>	3.45	3.25 2.95
118148EF	27C1024-15	40	64k x 16 1024kB 150ns (12.5V) CMOS .....	5.95	5.55	4.99
39669EF	27C010-20	32	128k x 8 1024kB 200ns (12.5V) CMOS .....	<del>\$4.75</del>	3.89	3.68 3.38
78852EF	27C020-12	32	256k x 8 2048kB 120ns (12.5V) CMOS .....	<del>\$7.29</del>	5.63	5.22 4.71
127933EF	27C4096-12	40	256k x 16 4096kB 120ns (12.5V) CMOS .....	9.22	8.60	7.85
111780EF	27C040-10	32	512k x 8 4096kB 100ns (12.5V) CMOS .....	6.92	6.41	5.90
102293EF	27C040-12	32	512k x 8 4096kB 120ns (12.5V) CMOS .....	<del>\$8.49</del>	6.92	6.41 5.90
156275EF	27C080-10	32	1M x 8 8192kB 100ns (12.5V) CMOS .....	<del>\$16.95</del>	12.91	11.99 10.96
140003EF	27C080-12	32	1M x 8 8192kB 120ns (12.5V) CMOS .....	<del>\$17.49</del>	12.91	11.99 10.96

See EPROM programmers on page 47

## EPROM Accessories

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Description	1	10	100
66042EF	DE1	UVP portable EPROM eraser, pg 47 .....	\$64.95	\$58.95	
15712EF	DE4	8-chip UV-EPROM eraser, pg 47 .....	Was <del>\$129.95</del>	109.95	104.95

## EEPROM

15 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
108847EF	24C04P	8	512 x 8 4096-bit serial (CMOS) .....	\$8.89	\$7.79	\$6.69
74691EF	28C16A-25	24	2k x 8 16k 250ns (5V) CMOS ..	<del>\$4.95</del>	3.99	3.69 3.39
74827EF	28C64A-25	28	8k x 8 64k 250ns (5V) CMOS .....	4.49	4.05	3.65
74878EF	28C256-25	28	32k x 8 256k 250ns CMOS .....	8.75	6.85	6.05

## PROM

13 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
27781EF	N82S129	16	256 x 4 1024-bit PROM tri-state (27S21) .....	\$7.95	\$6.95	\$6.25
48717EF	74S288	16	32 x 8 Tri-state (27S19/TBP18S030N) .....	2.99	2.55	2.42

## GAL

8 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
39167EF	22V10-25	24	25ns 132 x 44 AND array Lattice .....	\$3.99	\$3.49	\$3.09

## Static RAM

22 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
38957EF	2114N	18	1k x 4 450ns (9114BPC) .....	\$2.25	\$1.99	\$1.79
38973EF	2114N-2	18	1k x 4 200ns (9114EPC) (U214D20) .....	2.49	2.25	2.05
38981EF	2114N-2L	18	1k x 4 200ns low power .....	2.49	2.25	2.05
42198EF	5101	22	256 x 4 450ns (CMOS) .....	7.99	7.19	6.49
42930EF	6264P-12	28	8k x 8 120ns (64kB) CMOS .....	2.65	2.39	2.15
85121EF	6264LP-70	28	8k x 8 70ns (64kB) LP CMOS .....	3.39	2.99	2.69
42884EF	6264LP-10	28	8k x 8 100ns (64kB) LP CMOS ..	<del>\$3.16</del>	2.75	2.49 2.25
82472EF	62256LP-70	28	32k x 8 70ns low power CMOS .....	5.49	4.99	4.49
42833EF	62256LP-10	28	32k x 8 100ns low power CMOS .....	4.35	3.95	3.55
42850EF	62256LP-12	28	32k x 8 120ns low power CMOS ..	<del>\$4.25</del>	3.85	3.49 3.15
75037EF	ATT7C199P-15	28	32k x 8 15ns high speed CMOS (.3W) .....	3.39	2.99	2.69
131810EF	628128LP-70	32	128k x 8 70ns low power CMOS .....	8.95	7.79	6.99
157358EF	628512LP-70	32	512k x 8 70ns low power CMOS .....	19.99	17.99	16.19

\*\* Pull

## Flash Memory

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	50
74835EF	28F020-15	32	256k x 8 150ns (12V) CMOS .....	\$7.95	\$7.15	\$6.45

## AT89C Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Product No.	Pins	Description	1	10	100
168874EF	AT89C2051-24PC	20	8-bit MCU, 24MHz 2kb flash memory ...	\$3.59	\$2.39	\$2.15
168938EF	AT89C52-24JC	44	8-bit MCU, 24MHz 8kb flash mem. PLCC ..	4.35	2.83	2.53

## CPUs/MPUs

5 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Description	MHz	Socket	1	10	25
118421EF	486 speed doubler (Intel), 80486DX2	66	168/PGA .....	\$19.95	\$17.95	\$16.15
130833EF	Pentium® processor	133	296/PGA .....	29.95	26.95	24.25
130841EF	Pentium® processor	166	296/PGA .....	54.99	46.75	35.09
140054EF	** Pentium MMX® processor	200	376/PGA .....	49.95	37.45	26.25
150501EF	Pentium MMX® processor	233	376/PGA .....	69.95	62.95	54.95
190060EF	Pentium® II processor with heat sink	233	Slot 1 .....	89.95	79.95	72.95
151651EF	Pentium® II processor	300	Slot 1 .....	109.99	99.99	89.99
183100EF	Pentium® II processor	400	Slot 1 .....	124.99	109.99	99.99
192751EF	Athlon, A0750MPR24B	750	Slot A <del>\$129.95</del>	64.95	64.95	64.95
183118EF	Pentium® III processor	600	Slot 1 .....	159.95	153.79	147.49

\*\* Pull

## Dynamic Video RAM

8 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
41339EF	4116-15	16	16k x 1 150ns (MM5290J-1R) .....	\$9.99	\$8.89	\$8.80
128688EF	HM514260	SOJ	256k x 16 70ns .....	3.39	2.99	2.69

## 5000 Series

5 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	50
32803EF	TCM5089N	16	Integrated tone dialer chip .....	\$4.95	\$4.49	\$4.05

## 6500 Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
43166EF	** 65C02	40	MPU with internal clock (CMOS) .....	\$6.95	\$5.25	\$3.65
43254EF	** 6522	40	VIA (versatile interface adapter) 1MHz ..	2.39	2.15	1.94

\*\* Pull

## 6800 Series

15 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
43481EF	** 6800	40	8-bit MCU .....	\$6.95	\$5.25	\$3.65
43502EF	6802	40	8-bit MPU with clock and RAM (1MHz) ..	8.69	7.82	6.99
132484EF	MC68HC705C8S	40	8-bit HCMOS MCU, 8k bytes, EPROM ..	38.95	34.95	31.55

\*\* Pull

## 8000 Series

51 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
51844EF	** 8031	40	CPU with 128 x 8 RAM and I/O .....	\$3.29	\$2.99	\$2.69
102197EF	8032	40	8-bit MCU 256 x 8 RAM .....	3.95	3.59	3.25
51991EF	** 8051AP**	40	MCU w/128x8 RAM (book P/N 161402, pg 58) ....	5.49	4.99	4.49
125647EF	80C52BASIC	40	CPU 8-bit CMOS with basic interpreter .....	29.99	24.99	19.99
51705EF	80C85	40	CPU 8-bit N-channel (3MHz)(CMOS) .....	6.95	5.95	4.45
52142EF	** 8088	40	CPU 16-bit (8-bit data bus) 5MHz .....	2.49	2.25	1.99
52708EF	** 8254	24	Prog. interval timer (UPD71054) .....	4.49	3.99	3.59
52724EF	** 8255	40	Prog. peripheral I/O (PPI) 71055 (2MHz) .....	4.49	3.99	3.49
52732EF	** 8255A-5	40	Prog. peripheral I/O (PPI) 5MHz .....	<del>\$5.49</del>	4.89	4.39 2.89
52425EF	82C55A-5	40	Prog. peripheral I/O (PPI) CMOS (5MHz) .....	4.49	3.99	3.49
52759EF	** 8256	40	Multif. universal asynch. rec./trans. ....	19.99	17.99	16.19
52871EF	** 8284A	18	Clock gen. and driver (UPD71084) .....	4.49	3.99	3.59
52978EF	87C51	40	CPU w/ 4kx8 EPROM & 128x8 RAM(3.5-12MHz)	21.99	18.69	13.99

\*\* Tie pin 31 low to bypass the internal ROM

\*\* Pull

## 9000 Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
53663EF	9368	16	FND70 driver/latch .....	\$4.49	\$3.95	\$3.55
10567EF	** AM9513APC	40	System timing controller .....	39.95	33.99	25.49

\*\* Pull



Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

## MOTOROLA Type Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
24942EF	MC1350P	8	Video IF amp (12V operation)	\$1.29	\$1.19	\$1.09
25216EF	MC3479P	16	Biphasic stepper motor driver	5.75	5.18	4.65
25232EF	MC3486P	16	Quad EIA-422/423 line rec. w/ 3-state outputs	.59	.49	.45
25259EF	MC3487P	16	Quad EIA-422 line driver w/ 3-state outputs	.69	.59	.45
25275EF	MC4044P	14	Frequency phase detector (11C44)	9.99	7.49	5.25
25064EF	MC14490P	16	Hex contact bounce eliminator	6.95	6.25	5.59
118586EF	MC145151P	28	Parallel input PLL freq. synthesizer	5.95	5.39	4.85
25101EF	MC146818	24	Real time clock plus RAM	4.95	3.75	3.19

\* Pull

## DALLAS Semiconductor

5 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Product No.	Pins	Description	1	10	100
133410EF	DS1216C	28	Smartwatch/RAM 64K/256k	\$29.49	\$27.39	\$16.45
114278EF	DS1225AB-150	28	64k nonvol. SRAM 5%pw, 4.62V WP	17.29	14.49	9.89
177113EF	DS1230Y-100	28	256k nonvol. SRAM 10%pw, 4.37V WP	21.95	18.69	13.99
176778EF	DS1302	8	Trickle charge time keeping IC	2.49	2.25	2.05
114374EF	DS1387	24	RAMified real time clock 4kx8	Was \$9.95	8.95	8.15
114382EF	DS1620	8	Digital thermometer & thermostat	5.49	4.95	3.89

\* Pull

## CMOS PIC Microcontrollers

30 more @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Product No.	Pins	Conf.	Speed (MHz)	EPROM (Kbits)	RAM (Kbytes)	I/O Lines	1	10	100
145040EF	PIC12C508-04/P	8	OTP	4	512 x 12	25	5	\$1.89	\$1.75	\$1.49
134172EF	PIC16C56-RC/P	18	OTP	20	1k x 12	25	12	3.75	3.49	3.25
193447EF	PIC16F628-20/P	18	Flash	20	2k x 14	224	16	3.49	3.15	2.89
145111EF	PIC16F84-04/P	18	Flash	4	1k x 14	68	13	5.95	5.35	4.75
145120EF	PIC16F84-10/P	18	Flash	10	1k x 14	68	13	Was \$2.95	6.85	6.51
193332EF	PIC16F84A-20/P	18	Flash	20	1k x 14	68	13	5.95	5.35	5.09
193367EF	PIC16F876-20/SP	28	Flash	20	256 x 8	368	22	8.39	7.59	7.15
176882EF	PIC16F877-20/P	40	Flash	20	256 x 8	368	33	9.49	8.49	7.49

## Remote Control Decoders

Part No.	Product No.	Pins	Description	1	10	100
126607EF	HT648L	24	Decoder 10-bit address / 8-bit latch data	\$3.29	\$2.99	\$2.69

## UARTs

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
27596EF	NS16550AN	40	Univ. asynch. rcvr./trans. w/ FIFO (PC16550DN)	\$5.95	\$5.09	\$3.79

\* Pull

## A/D Converters

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
10153EF	ADC0804LCN	20	8-bit A/D converter (1 LSB)	\$2.69	\$2.39	\$2.09

## Harris/Intersil Type Series

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Part No.	Cross Ref.	Pins	Description	1	10	100
43756EF	7107CPL	40	3 1/2-digit LED single-chip A/D converter	\$3.49	\$2.79	\$2.59
51140EF	7555IPA	8	CMOS timer (LM555CN)	.54	.49	.39
51879EF	8038CCPD	14	Waveform generator/volt control OSC	3.19	2.49	2.39

## Optoisolators

22 more @ [www.Jameco.com](http://www.Jameco.com)

### Photo Transistors General Purpose (6-Pin DIP) Single & Dual Channel

- Base lead connected
- NPN output transistor
- IC<sub>EO</sub> (dark) V<sub>CE</sub> = 10V; 50nA max.
- Isolation test voltage: 7.5k V-P; 5.3k Vrms

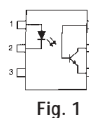


Fig. 1

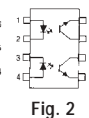


Fig. 2

Part Number	Mfr. Ref. No.	Fig.	Curr. Transfer Ratio (Min%)	Cont. Fwd. Curr. Max. (mA)	V <sub>CE</sub> (Sat) Max. (V)	Pricing			
						1	10	100	500
40985EF	4N25	1	20	50	0.5 (I <sub>F</sub> = 50mA) (I <sub>C</sub> = 2mA)	\$ .28	\$ .25	\$ .22	\$ .19
41056EF	4N35	1	100	50	0.3 (I <sub>F</sub> = 10mA) (I <sub>C</sub> = 5.0mA)	.39	.35	.25	.16
24918EF*	MCT6	2	20	50	0.4 (I <sub>F</sub> = 16mA) (I <sub>C</sub> = 0.2mA)	.49	.45	.41	.40
						Was \$0.59			

\* 2 independent isolators in one package, 8-pin DIP

## Microcontrollers

### 80C52-BASIC Microcontroller

The 80C52-BASIC chip is a custom-masked 80C52 microcontroller with a full-featured 8k-byte ROM-resident BASIC-52 interpreter.

- Hardware:**
- On-chip oscillator and clock circuit
  - Operates DC to 12MHz
  - 256 x 8-bit RAM
- Software:**
- Full BASIC interpreter in ROM on a single chip
  - "Stand-alone" software development
  - Interrupts can be handled by BASIC or Assembly Language



Part No.	Product No.	Description	1	10	100
125647EF	80C52BASIC	CPU 8-bit CMOS w/ BASIC interpreter	\$29.99	\$24.99	\$19.99

## Voice Chips

### Single-Chip Voice Record/Playback Devices

#### 10 to 120 Second Durations (28-pin DIP)

- Easy-to-use single-chip voice recording and playback
- Manual switch or microprocessor controllable
- Directly cascadable for longer durations
- Fully addressable to handle multiple messages
- Zero-power message storage – eliminates battery backup circuits
- Single voltage operation: +5V (4.5V to 5.5V operating range)
- Automatic power-down (push-button mode)
- Playback can be edge or level-activated
- 100-year message retention (typical)
- On-chip automatic gain control (AGC)



Part No.	Product No.	Description	1	10	50
141671EF	ISD1110P	Voice record/playback (10 sec.)	\$4.29	\$3.99	\$3.79
107334EF	ISD1420P	Voice record/playback (20 sec.)	5.39	5.09	4.89
120643EF	ISD2560	Voice record/playback (60 sec.)	9.19	8.59	7.79
120660EF	ISD2590	Voice record/playback (90 sec.)	9.29	8.69	7.89
141655EF	ISD25120P	Voice record/playback (120 sec.)	9.39	8.79	7.99

## Digital Interface ICs

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

### Stepper Motor Controllers

Designed to interface a logic level input byte to a stepper motor.

Part No.	Product No.	Pins	Description	1	10	50
141532EF	EDE1200	18	Unipolar stepper motor controller	\$8.95	\$7.95	\$6.95
157526EF	EDE1204	18	Bipolar stepper motor controller	8.95	7.95	6.95

## KAE Servo Motor Controller

More @ [www.Jameco.com/IC](http://www.Jameco.com/IC)

Controllers operate from standard 8-bit serial interface (RS232 or RS485). Using RS485, any mix of up to 32 controllers may be operated from a single serial port. Complete documentation.

### PIC-SERVO Motion Control Chipset for DC Motors

- PIC servo control for DC motors with digital encoders
- 32-bit position, velocity, and acceleration resolution
- PWM and direction outputs connect to servo amplifier
- Two chip set (PIC-SERVO 28-pin and PIC-ENC 18-pin)

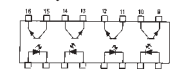


Part No.	Description	Pins	1	10	50
146472EF	PIC-SERVO chip set, 0.3" DIP	28/18	\$34.95	\$29.95	\$27.95

### ISOCOM

### Transistor/Detector Quad Channel (16-Pin DIP)

- High Isolation voltage/CTR/sensitivity
- 4 independent isolators in one package
- Isolation test voltage: 7.5k V-P; 5.3k Vrms

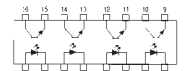


Part Number	Product Number	Curr. Trans. Ratio (Min%)	Cont. Fwd. Curr. Max. (mA)	Pricing			
		I <sub>F</sub> = 10mA V <sub>CE</sub> = 10V		1	10	100	500
114083EF	ISQ203	225-450	50	\$2.95	\$2.65	\$2.39	\$2.15

### ISOCOM

### Photo Transistor/Detector (16-Pin DIP)

- Isolation test voltage: 7.5k V-P; 5.3k Vrms
- NPN transistor
- Continuous forward current (max.): 50mA
- Photo transistor/detector



Part Number	Product Number	Curr. Transfer Ratio (Min%)	BV <sub>CEO</sub> (V)	V <sub>CE</sub> (Sat) I <sub>F</sub> =10mA; I <sub>C</sub> =2mA	Pricing			
					1	10	100	500
160338EF	PS2501-4	80-6000	80V	0.3V max.	\$1.35	\$1.12	\$ .95	\$ .85

## Aluminum Radial-Lead Electrolytic Capacitors

General purpose low voltage 85°C (A); HT Type 105°C (B) ±20%



Operating temperature range	-40°C to +85°C (A); -40°C to +105°C (B)		
Leakage Current (20°C)	After 1 min.	0.03CV or 4μA, whichever is greater	
	After 2 min.	0.01CV or 3μA, whichever is greater	

\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Reference No. †	Op. Temp	Value (μF)	Volt. (V)	Size (mm)* D x H	Pricing			
						1	10	100	500
94160EF	5R1/50	A	1	50	4x5	*	\$ .12	\$ .08	\$ .05
29831EF	R1/50	A	1	50	5x11	*	.057	.048	.038
93729EF	R2.2/50	A	2.2	50	5x11	*	.038	.033	.026
135183EF	R3.3/50	A	3.3	50	5x11	*	.07	.05	.035
31000EF	R4.7/50	A	4.7	50	5x11	*	.038	.033	.026
94220EF	5R10/35	A	10	35	5x5	*	.15	.12	.06
198942EF	R22J/35	A	22	35	5x11	*	.035	.03	.025
198926EF	R33J/25	A	33	25	5x11	*	.045	.035	.025
93745EF	R33/50	A	33	50	6x11	Was .007 *	.055	.05	.045
198951EF	R47J/35	A	47	35	5x10	*	.05	.04	.03
198969EF	R100J/35	A	100	35	6.3x11	*	.07	.06	.05
31181EF	R470/25	A	470	25	10x16	*	.12	.10	.09
30015EF	R1000/16	A	1000	16	13x21	*	.16	.14	.12
93841EF	R1000/50	A	1000	50	16x26	.52	.46	.41	.34
199110EF	R1000J/100	A	1000	100	18x40	3.59	2.69	1.99	1.55
30533EF	R2200/25	A	2200	25	16x36	.55	.49	.40	.30
158431EF	R2200B50	B	2200	50	16x31	.99	.89	.70	.61
93850EF	R4700/25	A	4700	25	18x35	.99	.85	.70	.55
199005EF	R4700J/35	A	4700	35	18x35.5	2.95	2.19	1.69	1.25
163301EF	R4700/50	A	4700	50	22x42	1.99	1.79	1.50	1.31

† RADIAL CAPACITOR CROSS REFERENCES \* Capacitor dimensions and lead spacing may vary  
 Elna: RC2/RE2; IC: RAR/RSS; Marcon: SEM/SSM; Nichicon: LB/VX/USA/SR/SA; Rubycon: MS7/TWSS;  
 Sprague: 501D/513D; UCC: SME/SRE/SRA/SG; Panasonic: KA/KS/SU

## Aluminum Axial-Lead Electrolytic Capacitors

General purpose low voltage 85°C



Operating temperature range	-40°C to +85°C		
Leakage Current (After 2 minutes 20°C)	0.02CV or 2μA, whichever is greater		

\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Reference No. †	Value (μF)	Voltage (V)	Size (mm)* DxH	Pricing			
					1	10	100	500
10866EF	A1/50	1	50	5x13	*	\$ .15	\$ .115	\$ .09
93569EF	A2.2/50	2.2	50	6x13	*	.19	.14	.10
199267EF	A22J/25	22	25	6x12	*	.20	.14	.10
199355EF	A47J/35	47	35	6.3x16	*	.20	.14	.10
93551EF	A100/35	100	35	8x16	*	.24	.19	.14
93649EF	A1000/35	1000	35	13x26	.85	.75	.59	.49
199478EF	A2200J/50	2200	50	18x42	2.55	2.10	1.95	1.75

\* Capacitor dimensions may vary

† AXIAL CAPACITOR CROSS REFERENCES: Elna: RE2; IC: RAR; Marcon: SEM; Nichicon: LB/VX;  
 Rubycon: TWSS; Sprague: 501D/513D; UCC: SME; Panasonic: SU

191 More @ [www.Jameco.com/Capacitors](http://www.Jameco.com/Capacitors)

Jameco carries a wide variety of capacitors.  
 Also see our website for memory  
 back-up and snap-in devices.



## Ceramic Disc Capacitors (±20%)

25 and 50 Volt, Z5U Temperature Coefficient

Operating temperature range	+10°C to +85°C
Cap. change over temp. range	+22% to -56%
Dielectric withstanding voltage	2.5 times rated volt. for not < 1 sec.

\* Prepackaged: order in increments of 10, 100 or 1000

*Ceramic Disc Capacitors can be special ordered on ammo-style tape – 1000 piece minimum*

Part Number	Mfr. Cross Ref. No.	Capacitance	Voltage (V)	Dia.* (mm)	Pricing			
					10	100	1000	5000
15333EF	DC10	10pF	50	5	\$ .07	\$ .05	\$ .02	\$ .015
15405EF	DC22	22pF	50	6	.07	.05	.025	.02
15190EF	DC.001	.001μF	50	6	.06	.05	.025	.022
15253EF	DC.047	.047μF	50	8	.084	.069	.057	.04
151116EF	DC.1/25	.1μF	25	6	.14	.13	.08	.07

\* Capacitor dimensions and lead spacing may vary

## Monolithic Ceramic Capacitors (±20%) (Z5U Series)

Applications:

- Data processing
- Communications engineering

Operating temperature range: -10°C to +85°C

*Ceramic Disc Capacitors can be special ordered on ammo-style tape – 1000 piece minimum*

\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No.	Capacitance	Volt. (V)	Size (mm)* W x T x H	Pricing				
					1	10	100	1000	5000
81541EF	MD10	10pF	50	3.5 x 2.0 x 3.0	10.12 *	\$ .10	\$ .07	\$ .045	\$ .045
81533EF	MD22	22pF	50	4.0 x 2.0 x 4.0	10.10 *	.095	.073	.045	.04
81525EF	MD100	100pF	50	3.5 x 2.0 x 3.0	*	.09	.07	.045	.035
25507EF	MD.01	.01μF	50	3.5 x 2.0 x 3.0	*	.09	.06	.04	.035
57621EF	MD.047	.047μF	50	2.5 x 2.5 x 3.0	*	.10	.07	.05	.045
25523EF	MD.1	.1μF	50	6.0 x 2.0 x 4.0	*	.07	.06	.04	.035
25558EF	MD.47	.47μF	50	4.5 x 2.5 x 4.5	*	.25	.19	.13	.12
81509EF	MD1	1μF	50	6.0 x 3.0 x 7.0	.48	.43	.32	.23	.21

\* Capacitor dimensions and lead spacing may vary

## Dipped Tantalum Capacitors (±10%)

Resin Dipped Solid Tantalum Capacitors

- Flame retardant coating
- Exceptional temperature stability
- Low leakage current
- Moisture-resistant
- Designed for entertainment and commercial equipment

Operating temp. range	-55°C to +85°C (+125°C with derating)
Rated voltage DC	≤ +85°C

\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No. †	Capacitance	Volt. (V)	Size (mm)* D x H	Pricing			
					1	10	100	1000
33486EF	TM.1	.1μF	35	4.5 x 7.0	*	\$ .25	\$ .19	\$ .15
33507EF	TM.22	.22μF	35	4.5 x 7.0	*	.25	.19	.15
33523EF	TM.33	.33μF	35	4.5 x 7.0	*	.25	.19	.15
154860EF	TM1/25	1μF	25	3.0 x 6.0	*	.29	.25	.22
33662EF	TM1	1μF	35	4.5 x 7.0	*	.29	.25	.22
33734EF	TM2.2	2.2μF	35	4.5 x 7.5	.39	.35	.29	.22
94043EF	TM4.7/25	4.7μF	25	5.0 x 8.5	.50	.45	.35	.20
33806EF	TM4.7	4.7μF	35	5.5 x 9.0	.55	.48	.37	.27
94060EF	TM10/16	10μF	16	5.0 x 9.0	.45	.39	.29	.25
94078EF	TM10/25	10μF	25	5.5 x 9.0	.59	.50	.40	.36
33689EF	TM10	10μF	35	6.0 x 10.0	.89	.79	.69	.59
94094EF	TM22/16	22μF	16	6.0 x 10.0	.69	.59	.49	.45
94107EF	TM22/25	22μF	25	7.0 x 10.5	1.85	1.79	1.59	.99
33785EF	TM33	33μF	25	8.0 x 13.0	2.59	2.25	1.79	1.10

\* Capacitor dimensions and lead spacing may vary

† Dipped Tantalum Capacitor Cross References

Panasonic: EF Series; AVX: Tap Series; Sprague: 196D and 199D;  
 Kemet: T350/ T360; Mepeco: 49GS; NEC: DN; Nichicon: 599; NIC: NDTM; Hitachi: TSD-3; Matsuo: 202





## Single Resistor Value Pricing: 1/4-Watt Carbon Film Resistors (±5%)

To order: Use 5-digit part number adjacent to ohms in chart below  
Values may not be combined for quantity price breaks

99¢/bag  
100 piece bags

Pricing (Sold in bags of 100 pieces)				
Specify Part No. & Resistor Value (see Standard Resistor Value Chart below)	1 Bag	10 Bags	50 Bags	100 Bags
	\$ .99/bag	\$ .57/bag	\$ .49/bag	\$ .46/bag

## Assortment Pricing: 1/4-Watt Carbon Film Resistor (±5%)

Assortments may not be combined for quantity price breaks

Part No.	Description (Including bulk pack values)	1	10	25
10719EF	5 ea. of 70 values (every other value from 10 ohm-5.6 MΩ) (350 pcs.)	\$9.95	\$8.95	\$7.95
103165EF	10 ea. of 24 values marked (●) and 50 ea. of 6 values marked (X) (540 pcs.)	12.95	11.49	9.95
10663EF	100 ea. of 27 values marked (▲) (2,700 pcs.)	24.95	22.49	20.49
10655EF	100 ea. of 160 values (all resistor values in the chart below) (16,000 pcs.)	119.95	107.95	96.95
81832EF	1/4 watt resistor component cabinet kit – 30 values (540 pcs.) see page 39	27.95	24.95	22.49

For more resistor values you can refer to our website @ [www.Jameco.com](http://www.Jameco.com)

## Standard Resistor Values Chart

Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
29882EF	▲● 10	30162EF	▲● 150	30963EF	● 390	29663EF	▲X 1.0k	30314EF	▲● 2.2k	31237EF	▲● 5.1k	30453EF	▲● 22k	30525EF	220k
31106EF	▲● 47	30470EF	▲X 220	31165EF	▲● 470	29735EF	● 1.2k	30390EF	▲● 2.7k	31270EF	▲● 5.6k	30841EF	▲● 33k	31202EF	▲● 470
29946EF	▲X 100	30605EF	▲● 270	31376EF	560	29760EF	▲● 1.5k	30672EF	▲● 3.3k	29911EF	▲X 10k	31149EF	▲● 47k	29698EF	▲● 1.0M
30082EF	120	30867EF	▲● 330	31499EF	▲● 680	30277EF	▲● 2.0k	31026EF	▲X 4.7k	30146EF	▲● 15k	29997EF	▲X 100k	29938EF	▲● 10M

## 1/8-Watt Carbon Film Resistor (±5%) Assortments

Any 1/8 or 1/2-Watt Resistor value (below) can be special ordered – 1000 pc minimum

• 1/8-W – \$12.95/k (bulk) • 1/2-W – \$15.95/k (bulk)

### 1/8 & 1/2-Watt Resistor Assortments Value Chart (Ohms)

10 X	150 X	330 X	680 X	2.0k X	3.3k X	5.6k X	15k X	33k X	470k X
47 X	220 #	390 X	1.0k #	2.2k X	4.7k #	6.8k X	22k X	47k X	1.0M X
100 #	270 X	470 X	1.5k X	2.7k X	5.1k X	10k #	27k X	100k #	10M X

(X), (#) symbols indicate Resistor values included in Assortments below.

Part No.	Cross Ref. No.	Values included	Description (see chart above)	Pricing	
				1	10
108302EF	ASST1830	X #	10 each of 24 values marked by X and 50 each of 6 values marked above by # (540 pcs.)	\$12.95	\$11.49
108329EF	CAB182R	— —	1/8-watt resistor component cabinet kit – 30 values (540 pcs.) see page 39	24.95	22.49
				Was \$27.95	

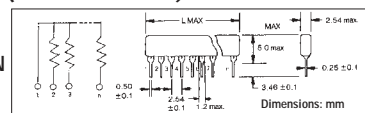
## 1/2-Watt Carbon Film Resistor (±5%) Assortments

Part No.	Cross Ref. No.	Values Included	Description (see chart above)	Pricing	
				1	10
107879EF	CAB12R	—	1/2-watt resistor component cabinet kit – 30 values (540 pcs.) see page 39	\$29.95	\$26.95

## Single-In-Line “SIP” Resistor Networks

8 and 10-Pin Bussed (125mW/Resistor) ±2%

- Features (8BRN/10BRN):
- 8-pin package (7 resistors) = 8BRN
- 10-pin package (9 resistors) = 10BRN
- Rated power per resistor at 70°C: 125mW/ resistor
- Op. temp. range: -55°C to +125°C
- Insulation resistance: 10,000MΩ min. at 100V
- Solderability: per MIL-R-83401
- Low profile 5mm (.200" body height)
- Low profile is compatible with DIPs
- Cermet thick film construction



\* 10 piece minimum

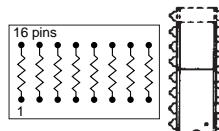
Pricing per each			
1	10	100	1000
* \$ .26	\$ .22	\$ .16	
Pricing for P/N 97826			
* \$ .22	\$ .19	\$ .13	

Part No.	Pins	Ohms
97826EF	8	10k
97851EF	10	330
97869EF	10	470
97877EF	10	1.0k
97893EF	10	2.2k
24660EF	10	4.7k
24643EF	10	10k
98087EF	10	47k
98095EF	10	100k

## Dual-In-Line “DIP” Resistor Networks

16-Pin Isolated (140mW/Resistor) ±2%

- Features (161RN):
- Maximum operating voltage: 100V
- Insulation resistance: 10,000MΩ min.
- Lead solderability/solvent resistance: meets requirements of MIL-R-83401
- Power rating at 70°C: 2.25 watts
- Compatible with automatic insertion equipment
- Copper leads for excellent heat dissipation
- Tolerance: ±2%



Pricing per each			
1	10	100	1000
\$ .49	\$ .43	\$ .37	\$ .31

Part No.	Ohms
164005EF	33
108556EF	100
108564EF	220
108572EF	330
108581EF	470
108599EF	1.0k
108610EF	4.7k
108628EF	10k
108644EF	100k

## SMD Resistor Assortment (±5%)

144 Values, 50 pcs. each; 7,200 Pieces Total



- Surface mount 0805 resistors, 144 values ranging from 1.2Ω to 10MΩ (50 pieces of each value)
- Thickness: 0.5mm
- Size: 2.0mm x 1.25mm
- Max. overload voltage: 200V
- Op. temp.: -50°C to 120°C

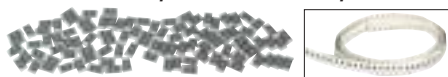
Includes: Case w/ labels

Part No.	Mfr. Cross Ref. No.	1	10	25
172806EF	16-500	\$79.95	\$71.95	\$64.79

♦ Surface mount

## SMD Resistor Assortment (±1%)

56 Values, 200 pcs. each; 11,200 pcs. Total



Packaged in strips of 200 pieces each

Surface mount 1206 Series resistors, 56 values ranging from 10 to 1MΩ – see chart.

- Max. working voltage: 200V
- Max. overload voltage: 400V
- Power @ 70°C: 1/8W
- Op. temp.: -55°C to +125°C
- Temp. coefficient: ±100 ppm/°C
- 4-digit indication: 1st 3 significant, 4th multiplier

### Value Chart (Ohms)

10	200	3.92k	75k
12.1	243	4.99k	90.9k
15	301	6.19k	100k
20	392	7.5k	121k
24.3	499	9.09k	150k
30.1	619	10k	200k
39.2	750	12.1k	243k
49.9	909	15k	301k
61.9	1k	20k	392k
75	1.21k	24.3k	499k
90.9	1.5k	30.1k	619k
100	2k	39.2k	750k
121	2.43k	49.9k	909k
150	3.01k	61.9k	1M

Part No.	Mfr. Cross Ref. No.	1	10	25
156881EF	SMR1206SB	\$99.99	\$89.99	\$79.99

♦ Surface mount

## SMD Plastic Fliptop Case

Store 128 Different Surface Mount Components

- Perfect solution for storing P/N 156881 SMD resistor assortment, left
- 8 rows x 16 column grid
- Fliptop openings on each bin
- Color: gray
- Padded cover locks bins closed
- Size: 11.0"L x 8.3"W x 1.7"Thick

Includes: Labels for each bin

Part No.	Description	1	10
164267EF	SMD fliptop case ♦	\$49.95	\$44.99

♦ Surface mount

Looking for more? Jameco has it all.

See our website for a broad selection of Resistors.

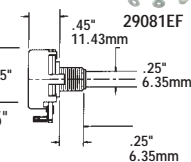


### 1/2-Watt Linear Taper ( $\pm 10\%$ )

- Temperature range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$
- Non-rotational key
- Non-slotted shaft end
- Mounting hole: 0.3125"
- Shaft diameter: 0.25"
- Shaft length: 0.5625"
- Max. panel thickness: 0.1875"

Includes: Mounting hardware

Part Number	Mfr. Cross Ref. No.	Ohms	Pricing			
			1	10	100	500
29049EF	P1K	1k	\$ .99	\$ .79	\$ .65	\$ .55
29081EF	P10K	10k	.99	.79	.65	.55

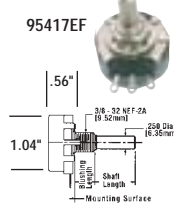


### 2-Watt Linear Taper ( $\pm 10\%$ )

- 2W @  $70^{\circ}\text{C}$  ambient
- Conductive plastic element
- Military No.: RV4N-AYSD
- Temp. range:  $-55^{\circ}$  to  $+120^{\circ}\text{C}$
- Non-rotational key
- Shaft: dia.: 0.25"; length: 0.875"
- Mounting hole: 0.375"
- Max. panel thickness: 0.25"

Includes: Mounting hardware

Part No.	Product No.	Ohms	1	10	50	100
183610EF	53C3-500	500	\$7.95	\$6.95	\$5.95	\$5.25
13936EF	CMU1021	1k	7.95	6.95	5.95	5.25
13995EF	CMU5021	5k	7.95	6.95	5.95	5.25
13952EF	CMU1031	10k	7.95	6.95	5.99	5.25
95417EF	CMU5031	50k	7.95	6.95	5.95	5.25



### 1/2-Watt, 3/8" Square, Single-Turn Cermet ( $\pm 10\%$ )

- 1/2 watt linear taper @  $70^{\circ}\text{C}$
- PC pins: .100" grid (2.54mm)
- Sealed to guard against contaminants
- Pin Spacing: 0.1"
- Top adjusting
- Temp. range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

Cross Reference Chart

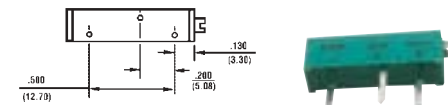
Equivalent to:	
Allen Bradley	E2B
Beckman	72PR
Bourns	3386P
Mecopac	8038
Murata	3104P
Spectrol	63P
VRN	780-12P
Weston	840P



Part Number	Mfr. Cross Ref. No.	Ohms	Pricing			
			1	10	100	500
43123EF	63P500	500	\$ .79	\$ .65	\$ .55	\$ .45
42964EF	63P1K	1k	.79	.65	.55	.45
43043EF	63P2K	2k	.79	.65	.55	.45
43078EF	63P5K	5k	.79	.65	.55	.45
43001EF	63P10K	10k	.79	.65	.55	.45
43051EF	63P20K	20k	.79	.63	.47	.33
43107EF	63P50K	50k	.79	.65	.55	.45
43027EF	63P100K	100k	.79	.65	.55	.45
43060EF	63P300K	300k	.79	.63	.47	.33
63212EF	63P500K	500k	.79	.65	.55	.45
42981EF	63P1MEG	1M	.79	.65	.55	.45
105216EF	63P2MEG	2M	.79	.63	.47	.33

† Pin spacing 0.2"

### 3/4-Watt, 3/4" Rectangular 15-Turn Linear Cermet ( $\pm 10\%$ )



- Side adjusting
- PC pins: .100" grid (2.54mm)
- Sealed to guard against contaminants
- Temp. range:  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

Part Number	Mfr. Cross Ref. No.	Ohms	Pricing			
			1	10	100	500
41937EF	43P500	500	\$1.15	\$ .99	\$ .89	\$ .69
41890EF	43P5K	5k	1.15	.99	.89	.69
41822EF	43P10K	10k	1.15	.99	.89	.69
41911EF	43P50K	50k	1.15	.99	.89	.69

### 5-Watt Linear Taper Wire Wound ( $\pm 20\%$ )

- Temperature range:  $-10^{\circ}\text{C}$  to  $70^{\circ}\text{C}$
- Shaft diameter: 0.23" (6mm)
- Shaft length: 0.67", except P/N 140521EF (0.25")
- Mounting hole: 0.32"
- Max. panel thickness: 0.1"
- Non-rotational key

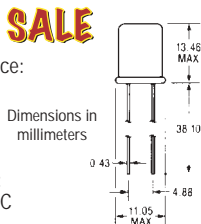
Includes: Mounting hardware

Part Number	Mfr. Cross Ref. No.	Ohms	1	10	50	100
140513EF	PW5B100	100	\$2.99	\$2.69	\$2.39	\$2.15
140521EF	PW5B500	500	2.95	2.65	2.39	2.15



## Crystals

- Frequency calibration tolerance:  $\pm 50\text{ppm}$  @  $25^{\circ}\text{C}$
- Operating temp.:  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Drive level: 4.0 mW max.
- Frequency stability tolerance:  $\pm 50\text{ ppm}$  from  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Shunt capacitance: 7pF max.



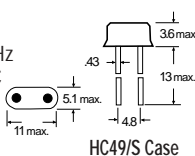
Dimensions in millimeters

### HC49/U (HC18/U) Case

Part Number	Mfr. Cross Reference No.	Frequency (MHz)	Impedance	Microprocessor	Pricing			
					1	10	100	1000
101274EF	CY2.457	2.4576	32pF	CDP1702/1802C/1804/1804C	\$ .99	\$ .89	\$ .79	\$ .69
14592EF	CY4	4.0	20pF	MCS-40/MC6802,8,9/CDP1802	<del>\$0.89</del> .59	.54	.41	.39
14710EF	CY7.37	7.3728	30pF	8051/8031	.89	.80	.65	.45
120061EF	CY11.05	11.0592	Series	General purpose	.89	.79	.69	.59

## Low Profile Crystals

- Frequency range: 3.5 to 70.0MHz
- Operating temp.:  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$
- Drive level: 0.5mW (fundamental frequency)
- Aging:  $\pm 5\text{ppm/year}$  maximum
- Frequency stability tolerance:  $\pm 50\text{ppm}$



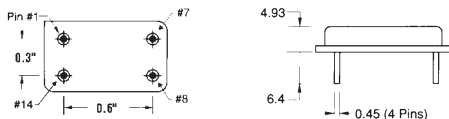
HC49/S Case

### HC49/S Case (Low Profile)

Part Number	Mfr. Cross Reference No.	Frequency (MHz)	Imped.	Max. Resist.	Microprocessor	Pricing			
						1	10	100	1000
137832EF	CY4LP	4.000	17pF	120 $\Omega$	MCS-40/MC6802, 8, 9/CDP1802	\$ .99	\$ .89	\$ .79	\$ .69
137859EF	CY8LP	8.000	Series	60 $\Omega$	IM6100A/MC68B09	.75	.67	.59	.53

## TTL Crystal Oscillators

- Input voltage:  $+5\text{VDC} \pm 0.5\text{VDC}$
- Frequency stability  $\pm 100\text{ppm}$
- OSC series oscillators fit into a 14-pin DIP socket PN 133006EF, below
- Operating temperature:  $0^{\circ}\text{C}$  to  $70^{\circ}\text{C}$



Pin #	Function
1	N/C
7	GND
8	Output
14	+5VDC

Part Number	Mfr. Cross Reference No.	Frequency (MHz)	Max Input Current	Rise Fall Time	Input Current	Output Current	Pricing			
							1	10	100	1000
27967EF	OSC4	4.0	7mA	10ns	50mA	-1mA	\$1.99	\$1.79	\$1.59	\$1.39
76857EF	OSC100	100.0	25mA	3ns	90mA	-4mA	2.49	2.25	1.95	1.75

## 34 More @ www.Jameco.com

Find a larger selection of Crystals and Oscillators on our website.



## 14-Pin Crystal Oscillator Socket

- Can be PCB mounted without the modifications that would be needed with DIP-IC sockets
- Low profile solder tail; machine tooled on 4 pins
- Good for prototyping and PCB mounting

Part No.	Description	1	10	100	1000
133006EF	Oscillator socket	\$ .55	\$ .46	\$ .34	\$ .31



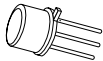


Call for pricing on quantities over 5000 – we carry major manufacturers.

Any transistor may be supplied in ammo style tape by special order – 1000 piece min.



TO-18 Case



TO-39 Case



TO-92 Case



TO-220 Case



\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No.	Case	Description	Vceo	Min. h <sub>FE</sub> @ Ic	Min. f <sub>t</sub> (MHz)	NTE/ ECG No.	Pricing			
								1	10	100	1000
33064EF	TIP32A	TO-220	PNP power transistor	60	10 @ 3A	0.5	292	\$ .49	\$ .44	\$ .39	\$ .29
38228EF	2N2219A	TO-39	NPN general purpose	40	100 @ 150mA	300	128	.59	.49	.45	.39
28628EF	PN2222	TO-92	NPN general purpose	30	100 @ 150mA	250	123AP	<del>\$0.12</del> *	.045	.027	.025
38236EF	2N2222A	TO-18	NPN general purpose	40	100 @ 150mA	250	123A	.39	.35	.29	.25
28644EF	PN2907	TO-92	PNP general purpose	40	100 @ 150mA	200	159	*	.13	.12	.11
38279EF	2N2907A	TO-18	PNP general purpose	60	100 @ 150mA	200	129P	.36	.34	.31	.25
25831EF	MJE2955T	TO-220	PNP power transistor	60	20 @ 4A	2	332	.59	.53	.42	.32
25857EF	MJE3055T	TO-220	NPN power transistor	60	20 @ 4A	2	331	<del>\$0.65</del> *	.52	.49	.44
38359EF	2N3904	TO-92	NPN general purpose	40	100 @ 10mA	300	123AP	*	.08	.06	.045

## Small-Signal High-Voltage

\* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Product No.	Case	Desc.	Vceo	Min. h <sub>FE</sub> @Ic (mA)	1	10	100	1000
178546EF	MPSA42	TO-92	NPN	300	40 @ 10	*	\$ .10	\$ .07	\$ .05

**SALE**

## Small-Signal General-Purpose

Prepackaged: order in increments of 10, 100 or 1000

Part No.	Product No.	Case	Desc.	Vceo	Min. h <sub>FE</sub> @Ic (mA)	1	10	100	1000
178511EF	PN2222A	TO-92	NPN	40	100 @ 150	<del>\$0.16</del>	\$ .09	\$ .06	\$ .04
178520EF	PN2907A	TO-92	PNP	-60	100 @ 150	<del>\$0.16</del>	.09	.06	.04
38375EF	2N3906	TO-92	PNP	40	100 @ 10	<del>\$0.87</del>	.05	.04	.03



## Power

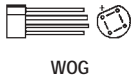
Part No.	Product No.	Case	Desc.	Vceo	Min. h <sub>FE</sub> @Ic	1	10	100	1000
179354EF	TIP31C-SAM	TO-220	NPN	100	10 @ 3A	\$ .49	\$ .39	\$ .29	\$ .19
179371EF	TIP41C-SAM	TO-220	NPN	100	15 @ 3A	.55	.39	.30	.28
179389EF	TIP42C-SAM	TO-220	PNP	-100	15 @ 3A	.55	.50	.45	.40

## N-Channel MOSFETs

\* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Case	Drain Source Brkdn Vltg.	Min. On-State DS Current	Pricing			
					1	10	100	1000
178669EF	2N7000-FSC	TO-92	60VDC	0.2A	*	\$ .12	\$ .11	\$ .10
184719EF	IRF840	TO-220	500VDC	8.0A	<del>\$1.59</del>	1.49	1.29	.99

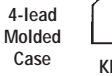
## Rectifiers, Triacs, SCRs and Diodes



WOG



4-Pin DIP Case



4-lead Molded Case



KBP type



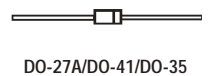
179-01 Case



TO-126 Case



TO-220/AB



DO-27A/DO-41/DO-35

## Full Wave Bridge Rectifiers

Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	Pricing			
					1	10	100	1000
103018EF	W02G	—	W0 type	200 PRV, 1A	<del>\$0.49</del>	\$ .32	\$ .30	\$ .22
103042EF	DF02M	5332	4-pin DIP	200 PRV, 1A	.31	.27	.21	.18
103034EF	DF06M	5332	4-pin DIP	600 PRV, 1A	.35	.29	.23	.19
145429EF	KBP02M	—	KBP type	200 PRV, 1.5A	.49	.44	.39	.29
25574EF	MDA990-3	5322	179-01	200 PRV, 30A	4.49	3.99	3.39	2.89

## Triacs

Part Number	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	Pricing			
					1	10	100	1000
140425EF	2N6071A	5603	TO-225AA	200 V <sub>DRM</sub> , 4A	\$ .49	\$ .39	\$ .32	\$ .29
31819EF	SC146B	5633	TO-220	200 V <sub>DRM</sub> , 10A (2N6342)	1.69	1.52	1.37	1.23

## Rectifiers

Part No.	Product No.	Case	Description	10	100	1000
35975EF	1N4001	DO-41	50 PRV, 1A	\$ .03	\$ .025	\$ .02
76961EF	1N4002	DO-41	100 PRV, 1A	.03	.025	.02
76970EF	1N4003	DO-41	200 PRV, 1A	.04	.025	.02
35991EF	1N4004	DO-41	400 PRV, 1A	.04	.025	.02

Prepackaged: order in increments of 10, 100 or 1000

## Silicon Rectifiers

Part No.	Mfr Cross Ref. No.	NTE/ECG	Case	Description	Pricing		
					10	100	1000
36011EF	1N4007	125	DO-41	1000 PRV, 1A	\$ .04	\$ .03	\$ .025
36265EF	1N5404	5804	DO-27A	400 PRV, 3A	<del>\$0.15</del>	.11	.07
36273EF	1N5408	5809	DO-27A	1000 PRV, 3A	.15	.11	.08

Prepackaged: order in increments of 10, 100 or 1000

## Zener Diodes

**SALE**

Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	Pricing			
					10	100	500	1000
36089EF	1N4732	5096	DO-41	4.7V @ 53mA 1 W	<del>\$0.12</del>	\$ .09	\$ .06	\$ .05
36097EF	1N4733	135A	DO-41	5.1V @ 49mA 1 W	<del>\$0.12</del>	.09	.06	.05
36118EF	1N4734	136A	DO-41	5.6V @ 45mA 1 W	<del>\$0.25</del>	.09	.06	.05
36126EF	1N4735	137A	DO-41	6.2V @ 41mA 1 W	<del>\$0.12</del>	.09	.06	.05
36169EF	1N4742	142A	DO-41	12.0V @ 21mA 1 W	<del>\$0.12</del>	.09	.06	.05

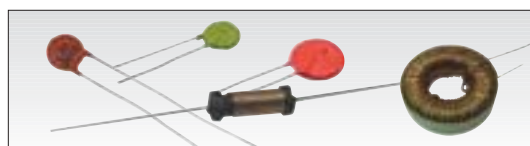
## Switching Diodes

Prepackaged: order in increments of 10, 100 or 1000

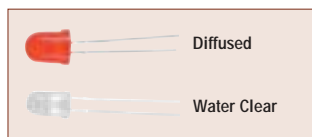
Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	Pricing		
					10	100	1000
35967EF	1N3600	519	DO-35	50 PRV @ 100µA, 200mA	\$ .12	\$ .10	\$ .08
36038EF	1N4148	519	DO-35	75 PRV @ 50µA, 10mA	.04	.03	.025

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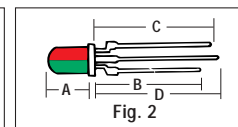
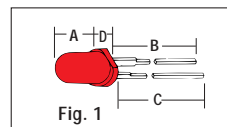
LITEON



TEXAS INSTRUMENTS



hp



## Standard-Output LEDs

\* Prepackaged: order in increments of 10, 100 or 1000

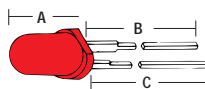
Part Number	Mfr. Cross Ref. No.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
							A	B	C	D					1	10	100	1000
137411EF	LVB2040	1	Blue	Blue diffused	T1	.119/3	0.21	0.98	1.03	0.04	0.10	4.8 @ 20	10 @ 20	430	\$2.49	\$2.25	\$1.95	\$1.69
34622EF	LR2040	1	Orange Red	Red diffused (XC209R)	T1	.119/3	0.14	1.09	1.14	0.04	0.09	2.0 @ 20	1.5 @ 10	655	*	.15	.13	.095
94529EF	LH2040	1	Red	Red diffused (XC209RB)	T1	.119/3	0.18	1.04	1.13	0.03	0.07	2.3 @ 20	4.5 @ 10	697	*	.19	.15	.12
138691EF	LVB3330	1	Blue	Blue diffused	T1 3/4	.197/5	0.34	0.98	1.03	0.06	0.08	5.5 @ 20	10 @ 20	430	\$2.75	2.14	2.04	1.95
134332EF	LT18B3-81UR	1	Blue	Water clear	T1 3/4	.197/5	0.30	0.93	1.00	0.04	0.10	3.8 @ 20	350 @ 20	428	\$2.95	2.65	2.45	2.25
34761EF	LG3330	1	Green	Green diffused (XC556G)	T1 3/4	.197/5	0.31	0.79	0.88	0.04	0.09	2.8 @ 20	12 @ 10	565	*	.15	.14	.10
94511EF	LH3330	1	Red	Red diffused (XC556RB)	T1 3/4	.197/5	0.31	0.81	0.86	0.04	0.08	2.3 @ 20	3.0 @ 10	697	*	.17	.13	.10
34673EF	LHG3392	2	Red/Green	White diff. bi-color/tri-state	T1 3/4	.197/5	0.30	1.02	1.05	1.12	0.03	2.8 @ 20	3 & 12 @ 10	697/565	.24	.22	.20	.14

## LEDTECH LEDs

• Typical DC forward current 20mA

Ledtech is a QS9000 and ISO-9000 Certified Company

SALE



152864EF

\* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Product Number	Emitting Color	Lens/Feature Description	LED Size	Dia. (inch/mm)	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
						A	B	C	D					1	10	100	1000
152768EF	LT0324-41	Green	Green clear	T1	.119/3	0.20	0.89	0.95	—	0.10	2.1 @ 20	20 @ 20	567	*	\$ .12	\$ .09	\$ .07
152750EF	LT0344R-41	Orange Red	Red clear	T1	.119/3	0.20	0.89	0.95	—	0.10	2.1 @ 20	23.5 @ 10	635	*	.19	.16	.12
152864EF	LT1873-81	Red Super Brt.	Water clear	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.7 @ 20	1000 @ 20	660	.29	.24	.19	.15
152805EF	LT1873-81-UR	Red Ultra Brt.	Water clear	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.9 @ 20	2000 @ 20	660	\$0.35	.29	.25	.19
156970EF	LT1873-UR-C07	Red Ultra Brt.	Water clear (wide angle)	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.9 @ 20	2112 @ 20	660	.35	.31	.25	.19

## LED Mounting Hardware



95513EF



23077EF



95521EF

Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Description	Color	Mounting Hole Dia.	Panel Thickness	Pricing		
						10	100	1000
95513EF	LMH100	T1 snap-in	Black	.185"	Up to .070"	\$0.13	\$ .08	\$ .07
23077EF	LMH200	T1 1/4 ring & clip	Black	.257"	Up to .125"	.15	.135	.12
95521EF	LMH250	Rect. snap-in	Black	.306" x .202"	Up to .092"	.20	.18	.16



## T1 3/4 Ciplite® LED Lens Mount

- Requires no assembly tools, just snap in
- Material: lens – polycarbonate; spacer – nylon
- Increases viewing angle to 180°
- Devices mount on .375" centers
- Helps guard against electrostatic discharge up to 16kV while affording the LED physical protection



29612EF



Fig. 1 (5mm)

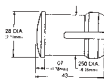
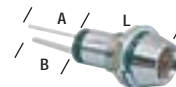


Fig. 2 (5mm)

Part No.	Product No.	Description	Color	Fig.	Mounting Hole Dia.	Panel Thickness	Pricing			
							1	10	100	1000
14277EF	CLF280CTP	T1 3/4	Clear	1	.25"	.063" – .125"	\$ .22	\$ .19	\$ .16	\$ .14
29612EF	CLF280RTP	T1 3/4	Red	1	.25"	.063" – .125"	.23	.19	.16	.14
124927EF	CLB300CTP	T1 3/4	Clear	2	.25"	.031" – .25"	.23	.20	.16	.14

## Panel Mount LED Indicators

- Easy panel installation
- Panel/status/ instrument indicators
- Vf @ If: 2V @ 20mA
- Color: red
- Chrome housing

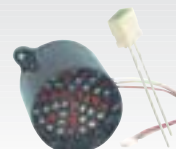


141129EF: LED size: T1 • Mounting hole: .24"  
141137EF: LED size: T1 1/4 • Mounting hole: .31"

Part No.	Mfr. Cross Ref. No.	Dimensions (in.)			Pricing		
		L	A	B	1	10	100
141129EF	L913RD	.56	.39	.32	\$1.09	\$ .81	\$ .69
141137EF	L917RD	.70	.55	.47	.89	.79	.71

More @ [www.Jameco.com](http://www.Jameco.com)

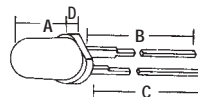
Additional Hi-Output LEDs and Accessories on our website.



## Infrared Emitters

- Use for remote control and/or for fiber optics
- P/N 133946EF: Can be used with cameras, see pg 16 (peak emission wavelength: 940nm @ If 20mA)

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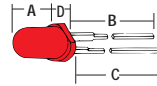
29612EF

Part No.	Mfr. Cross Ref. No.	Description	Size	Diameter inch/mm	Dimensions (Inches)				Vf @ If	nm	mWatts	Pricing			
					A	B	C	D				1	10	100	1000
106526EF	TLN110	Infrared emitter diode (GaAs)	T1 1/4	0.200/5	0.34	0.78	0.84	0.04	1.2V @ 20mA	940	9	\$0.45	\$ .39	\$ .29	\$ .19
133946EF	SLI-0308CP	Infrared emitter diode (GaAs)	T1	0.12/3	0.22	0.98	1.00	0.03	1.7V @ 50mA	940	200	\$0.83	.62	.53	.40



## High-Output LEDs

- Typical DC forward current 20mA


**SALE**

Part No.	Mfr. Cross Reference No.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
						A	B	C	D					1	10	100	1000
131895EF	TLSH180P	Orange	Water clear	T1 3/4	.197/5	0.39	0.80	0.86	0.06	0.10	2.1 @ 20	7000 @ 20	623	\$2.49	\$2.19	\$1.95	\$1.79
215597EF	LT2K33-81-UC9T	Yellow	Water clear	T1 3/4	.197/5	0.31	0.89	0.95	0.04	0.10	2.2 @ 20	5000 @ 20	590	.59	.55	.49	.45
183214EF	MCDPG503PCI	Green	Water clear	T1 3/4	.197/5	0.30	1.04	1.09	0.04	0.08	3.5 @ 20	2200 @ 20	515	2.95	2.65	2.39	2.15
183222EF	MCDL513SBC4	Blue	Water clear	T1 3/4	.197/5	0.29	1.02	1.13	0.04	0.08	5.0 @ 20	3000 @ 20	470	3.25	2.95	2.65	2.39
183231EF	T18W133196	White	Water clear	T1 3/4	.197/5	0.30	1.06	1.12	0.04	0.08	3.6 @ 20	3000 @ 20	—	2.95	2.65	2.39	2.15
142893EF	CLP1509	White	Water clear	T1 3/4	.197/5	0.34	0.79	0.88	0.04	0.08	3.6 @ 20	3700 @ 20	—	3.95	3.59	2.95	2.75
197641EF	BVT529T13E	Yellow	Yellow transp.	Oval	.170/.220	0.29	1.04	1.09	—	0.08	2.3 @ 20	7800 @ 20	590	.69	.62	.55	.49

## LED Displays

The general advantages of LED displays compared to incandescent types include:

- Longer lifetime (averaged more than 300,000 hours)
- Lower power consumption
- Compact size suitable for instrumentation and graphic representations

### Soldering:

- Soldering bath: not more than 5 seconds @ 260°C
- Soldering iron: not more than 3 seconds @ 300°C under 30W



24740EF &amp; 24782EF



17187EF



32951EF



118906EF



### 7-Segment Displays

	Mr. Cross	Character	Illuminated	Buss	Pins/	Typical	Typical	Wavelength	Decimal	Pricing			
Part No.	Reference No.	Height	Color	Polarity*	Leads	Vf @ If (mA)	mcd @ mA	nm	Point #	1	10	100	1000
24740EF	LSD3221-11	.300"	Red	CA	11	2.1 @ 20	2.5 @ 20	697	LHDP	<del>\$0.89</del> \$ .79	\$ .72	\$ .64	\$ .58
24782EF	LSD3211-11	.300"	Red	CC	10	2.1 @ 20	2.5 @ 20	697	RHDP	.89	.75	.65	.49
17187EF	LSD5051-11	.500"	Red	CC	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.80	.72	.65
17208EF	LSD5061-11	.500"	Red	CA	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
24715EF	LDD5121-20	.560"	Red	2-digit CA	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
97199EF	LSD23265-10	2.24"	Red	CA	10	1.7 @ 20	21 @ 20	660	RHDP	5.75	5.19	4.69	4.19
105591EF	LSD40054-20†	4.0"	Orange Red	CA	10	2.0 @ 20	18 @ 20	635	RHDP	9.49	8.29	7.49	6.49

† P/N 105591: 5 diodes per segment

**SALE**


### Dot Matrix Displays

Part No.	Mfr. Cross Reference No.	Jameco Socket Number	Character Height	Illuminated Color	Buss Polarity*	Pins/Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing			
											1	10	100	1000
173833EF	HP5082-7300	—	.290"	Red	4x7 Numeric	8	5.0 @ 170	.03 @ 20	660	RHDP	\$7.95	\$7.19	\$5.75	\$4.25
32951EF	TIL311	37161EF	.300"	Red	4x7 Hex character	11	5.0 @ 5	0.1 @ 5	660	—	16.95	14.35	12.92	11.62
118906EF	LTP747R	37161EF	.680"	Orange Red	5 x 7 AC/CR	12	1.7 @ 20	0.2 @ 20	655	—	1.95	1.79	1.45	1.05
183265EF	LMD5821ASR-20	—	2.3"	Red	5 x 8 CC/AR	14	1.7 @ 20	12 @ 20	660	—	4.95	4.49	3.95	3.49

\* CA-Common Anode/CC-Common Cathode/AC-Anode Column/CR-Cathode Row/AR-Anode Row # LHDP-Left Hand Decimal Point / RHDP-Right Hand Decimal Point

## CDS Photocells

- Generate variable signal based on detection of light levels
- Operating temperature: -30°C to +70°C
- Applications: auto-focus lenses, exposure meters, contrast controls for TVs, dimmer or light switches, flame detectors, electronic toys, street lamp switches, optocouplers
- Soldering: 230°C for 3 seconds
- Cadmium Sulfide (CDS)

 120299EF	Part No.	Mr. Cross Ref. No.	Rating		Resistance (Ω)		Size (inches)		Lead Spacing (inches)	Lead Length (inches)	Pricing			
			Vp	mW	Dark	Light	A	B			1	10	100	1000
	136063EF	CDST18	20	40	100k	10k	0.14	0.17	0.10	1.50	\$ .69	\$ .62	\$ .49	\$ .37
	120299EF	CDS0045001	350	400	300k	8k	0.38	0.43	0.30	1.44	1.79	1.59	1.45	1.29

## LCD Modules

**Scott Edwards Electronics, Inc.**

### Serial LCD Modules

Includes instruction codes for character gen., cursor control, printing, etc. Examples for Stamps in PBASIC included.

Ideal for use w/ BASIC Stamps (pg 102), 80C52-BASIC controllers (pg 21) and PCs!

#### 16 characters x 2 lines Integrated Display

- Terminal style 1200-9600bps serial input with 16-byte input buffer
- EEPROM storage of settings, six custom characters, and a splash screen
- Serial control of the standard LED backlight
- Low current draw: 5mA (backlight off) to 40mA (backlight on and bright)
- Power requirement: 4.8 – 5.5VDC @ 5mA (recommnd P/N 164101EF, pg 37)

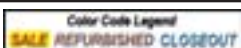


#### 16 characters x 2 lines LCD Serial Backpack®

- High-contrast supertwist display
- Serial "backpack" accepts RS-232, or inverted CMOS, TTL at 2400 or 9600bps
- Power requirement: 4.8 – 5.5VDC @ 3mA (recommnd P/N 164101EF, pg 37)
- Connector: 5-pin header (recommnd P/N 163686EF, see web)



Part No.	Description	Module Size (LxWxT)	1	10	25	Part No.	Description	Module Size (LxWxT)	1	10	25
150990EF	LCD module	3.2" x 2.0" x 0.5"	\$48.95	\$44.09	\$39.65	133129EF	LCD module	3.1" x 1.4" x 0.7"	\$59.95	\$53.99	\$48.99



Order 24/7 Toll Free 1-800-455-6119



**Point Six 16 x 4 Parallel LCD Module**

- 16 x 4 character display (.78"H)
- Character font: 5 x 8 dots
- Input data: 4-bit or 8-bit interface available
- Display size: 2.4"L x 1.0"W x 0.06"T

Requires: 4.5V @ 2mA wall transformer (recommend P/N 164101EF, pg 37)

Part No.	Description	Module Size (LxWxT)	1	10	25
151933EF	16 x 4 parallel LCD	3.4" x 2.4" x .25" .....	\$24.95	\$22.49	\$19.95

**Serial LCD Interface Module***For Parallel LCD Displays with Hitachi 44780 Chipset*

- Supports 1 x 8 thru 4 x 20 LCD display formats
- Provides word wrap, control character processing for display blanking, cursor blanking, up-down-left-right cursor controls
- Compatible with P/Ns 151933EF (above) and 171715EF (right)

Part No.	Description	Size (LxW)	1	10	25
157981EF	LCD serial module	1.5" x 1.0" .....	\$22.95	\$20.95	\$18.95

**0.6" High 3½-Digit LCD Digital Panel Meters**

- Automatic polarity indication
- Input impedance: >100MΩ
- Input Ranges: 200mV, 20V, 200V, 500V
- Accuracy: ±0.5% • Bezel
- Dimensions: 2.7"L x 1.7"W
- Supply voltage: 8-12VDC (recommend 9V battery P/N 151095EF, pg 95)

175951EF



Part No.	Description	1	10	25
175951EF	"1999" LCD DPM .....	\$12.95	\$11.95	\$10.95
146835EF	"1999" LCD DPM backlit display .....	19.95	17.99	16.19

**40 x 2 Parallel LCD Module with Backlight**

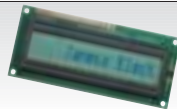
- 40 x 2 character display
- Control chip HCD44780
- Character font: 5 x 8 dots
- Column driver: KS0063B
- Backlight: yellow-green
- Supply voltage (logic): 5VDC @ 5mA
- Display size: 5.81"L x 0.45"W
- Module size: 7.2"L x 1.4"W x 0.4" Thick



Part No.	Description	1	10	25
215159EF	40 x 2 parallel LCD .....	\$29.99	\$26.99	\$24.29

**More @ www.Jameco.com**

See our website for our complete selection of LCD Modules and Displays.

**LCD Parallel Display****16 Characters x 2 Lines**

- 14-pin/terminals
- Controller: KS0066U or equivalent
- Character font size: 0.125"W x 0.200"H
- Max. input voltage: 5.3VDC
- 8-bit interface data bus
- Display size: 2.5"L x 0.7"W
- Operating input voltage: 5VDC (recommend P/N 164101EF, pg 37)



Part No.	Product No.	Module Size (LxWxT)	1	10	25
171715EF	AC162A	3.4" x 1.2" x 0.5" .....	\$19.95	\$17.95	\$15.95

**16 Characters x 2 Lines Serial LCD Module**

- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping, and auto scroll feature
- Serial input at 1200-19,200bps (jumper selectable)
- Connect 16 modules using same 2 wire interface
- Backlight supply current: 40mA typical
- Display size: 2.5"L x 0.7"W
- Power requirement: 5VDC @ 9mA (recommend P/N 164101EF, pg 37)

**SALE**

Includes: Manual and software

Part No.	Description	Module Size (LxWxT)	1	10	25
174166EF	16 x 2 w/ interface	3.2" x 1.5" x 0.8" Was \$64.95	\$52.39	\$51.19	\$49.95

**20 x 4 Serial LCD Modules**

- 20 characters x 4 line display with large digit mode
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature
- Backlight supply current: 90mA typical
- Serial input at 1200-19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- Display size: 3.0"L x 1.0"W



150957EF

Includes: Manual and software

**150957EF: 20 x 4 Serial LCD Module**

- Power requirement: 5VDC @ 10mA typical (recommend P/N 164101EF, pg 37)

**SALE**

157323EF

**157323EF: 20x4 Serial LCD Module with keypad Interface**

- Power requirements: 5VDC @ 16mA typical (recommend P/N 164101EF, pg 37)

Part No.	Description	Module Size (LxWxT)	1	10	25
150957EF	LCD module	3.9" x 2.4" x 0.7" Was \$89.95	\$54.19	\$52.69	\$51.19
157323EF	Module w/ interface	3.7" x 2.4" x 1.1" Was \$109.95	72.95	71.15	68.99

**AC Tube Axial Fans**

124062EF



106585EF



- Rating 115 & 220VAC @ 50/60Hz
- Low acoustical noise rating
- Agency approved fans
- Ball and sleeve bearings
- Air flow from 11 to 211 CFM



16934EF



102891EF

Part Number	Manufacturer	Product Number	Voltage (VAC)	Dimensions (W" x H" x D")	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
162704EF	Toyco	USTF60301153W	115	2.36 x 2.36 x 1.18	11	Ball	38	4	UL/CSA/CE	29	12" leads	\$15.49	\$13.95	\$12.55	\$11.29
124062EF	Sunon	SP101AT1122HBT	115	4.68 x 4.68 x 1.00	78	Ball	180	18	CSA/TUV/CE	46	terminals	13.49	10.95	9.89	9.19
118965EF	Fulltech	UF12A12BTL1	115	4.68 x 4.68 x 1.50	64	Ball	80	15	UL/CSA/TUV/CE	37	terminals	14.95	13.49	12.15	10.95
106585EF	Common Wealth	FP108-1-S1/T	115	4.68 x 4.68 x 1.50	105	Sleeve	180	12	UL/CSA/CE	47	terminals	15.95	14.39	12.95	11.65
16934EF	Common Wealth	FP108-1-S1-B	115	4.68 x 4.68 x 1.50	105	Ball	200	17	UL/CSA/TUV/CE	47	terminals	16.95	15.29	13.75	12.39
102883EF	Sunon	SP100A-1123XBT	115	4.68 x 4.68 x 1.50	117	Ball	240	20	UL/CSA/TUV/CE	50	terminals	14.95	13.95	12.95	11.95
108724EF	Fulltech	UF15AC12BTH	115	6.75 x 5.90 x 1.50	211	Ball	230	28	UL/CSA/TUV/CE	58	terminals	27.95	27.10	26.29	25.49
102891EF	Sunon	DP200A-2123XBT	220	4.68 x 4.68 x 1.50	117	Ball	120	21	UL/CSA/TUV/CE	50	terminals	15.95	14.39	12.95	11.65

**Straight and Right-Angle 24" Fan Cords**

- Cord type: SPT-1 (2) conductor black
- Volt. rating: 300V
- Temp. range: 60°C
- Fits all terminal fans

Part No.	Description	Length	1	10	100	250
28564EF	Straight socket cord	24"	\$.75	\$.68	\$.55	\$.50
104192EF	90° angle socket cord	24"	.87	.76	.61	.57



28564EF



104192EF





Call for additional OEM PRICING – we carry major manufacturers.

- Low profile
- Agency approved
- Ball and sleeve bearings
- Low power consumption
- Low acoustical noise rating
- Power input by lead wires or terminals
- PBT black thermo plastic frame and impeller



+ Size Conversion Inches to MM					
Inches	MM	Inches	MM	Inches	MM
0.25	6	1.20	30	2.48	75
0.40	10	1.40	35	3.15	80
0.60	15	1.60	40	3.63	92
0.80	20	1.80	45	3.72	95
0.90	23	2.00	50	3.83	97
1.00	25	2.36	60	4.68	120

Part Number	Manufacturer	Product Number	Voltage (VDC)	* Dimensions (W" x H" x D")	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
161699EF	Sunon	KD1204PFB2-8	12	1.60 x 1.60 x 0.40	6.3	Ball	70	0.6	UL/CSA/TUV	30	12"	\$7.95	\$6.95	\$6.25	\$5.59
213891EF	Adda	AD0412MB-D50	12	1.60 x 1.60 x 0.60	8.1	Ball	100	1.2	UL/CUL/CE	31.8	11.5"	7.59	7.19	6.45	5.85
136178EF	Adda	AD0412MS-C70	12	1.60 x 1.60 x 0.80	5	Sleeve	110	1.32	UL/CSA	23	9"	5.49	4.99	3.99	2.99
75344EF	Delta	DFB0412M	12	1.60 x 1.60 x 0.80	7.3	Ball	80	0.8	UL/CSA/VDE/CE	28	4.5"	7.69	6.95	6.25	5.65
175046EF	Globe Motors	D24-B08A-04W3-000	12	2.36 x 2.36 x 0.80	10.6	Ball	90	0.8	UL/CSA/TUV/CE	22	13"	6.95	6.29	5.05	3.79
75352EF	Common Wealth	FP108FDC12VS2	12	2.36 x 2.36 x 1.00	15.5	Sleeve	110	1.3	UL/CSA/TUV/CE	25	12"	6.95	6.29	5.05	3.79
150421EF	Jamicon	JF0625B1H	12	2.36 x 2.36 x 1.00	20.5	Ball	230	2.7	UL/CSA/TUV	30.5	10"	6.95	6.29	5.65	5.09
134586EF	Delta 1	BFB0712H	12	2.98 x 2.98 x 1.18	11.3	Ball	360	2.6	UL/CSA/TUV/VDE	38	4"	13.95	12.59	11.29	10.19
16993EF	Various 2 *	FAN7315SL	12	3.15 x 3.15 x 1.00	25-40*	Sleeve	120-200*	1-2*	UL/CSA*	25*	4-12**	6.95	6.29	5.65	4.95
75361EF	Various*	FAN6315BL	12	3.15 x 3.15 x 1.00	25-40*	Ball	120-200*	1-2*	UL/CSA*	25*	4-12**	5.95	5.39	4.35	3.25
154288EF	Sunon	KDE1208PTS3-6	12	3.15 x 3.15 x 1.00	29.4	Sleeve	120	1.4	UL/CSA/TUV/CE	24.5	5.5"	4.55	4.09	3.29	2.45
185826EF	NMB 3	3110KL-04W-B69	12	3.15 x 3.15 x 1.00	42	Ball	340	3.1	UL/CSA/VDE/CE	35	13*/3 leads	6.95	6.29	5.05	3.79
102955EF	Sunon	KD1208PTB1-6	12	3.15 x 3.15 x 1.00	42.5	Ball	220	2.6	UL/CSA/TUV/CE	33.5	12" <del>\$8.95</del>	6.49	5.85	5.29	4.75
172460EF	Nidec 2	TA300DCM33406-68	12	3.15 x 3.15 x 1.00	43	Ball	290	3.5	UL/CSA	41	11*/3 leads	9.95	8.99	7.19	5.39
190983EF	Sunon	KD1209PTB1-6A	12	3.63 x 3.63 x 1.00	51	Ball	220	2.6	UL/CSA/TUV	34	12"	7.25	6.55	5.89	5.29
162739EF	NMB (Smart Fan)†	3610KL-04W-B56	12	3.63 x 3.63 x 1.00	55	Ball	430	3.8	UL/CSA/VDE/CE	37	10*/3 leads	7.95	7.19	5.75	4.35
174140EF	Common Wealth	FP108MS3	12	4.68 x 4.68 x 1.00	54	Sleeve	140	1.7	UL/CSA/TUV/CE	25	12"	6.95	6.29	5.05	3.79
102875EF	Delta	WFB1212H	12	4.68 x 4.68 x 1.00	86.5	Ball	360	4.3	UL/CSA/TUV	37.6	12"	10.95	9.89	7.95	5.95
94625EF	Sunon	KD1212PMB1-6A	12	4.68 x 4.68 x 1.50	108	Ball	570	6.8	UL/CSA/TUV/CE	42	12"	11.95	10.79	8.65	6.49
189851EF	Delta	WFB1212HE	12	4.68 x 4.68 x 1.50	108	Ball	490	5.9	UL/CSA/VDE/CE	41.3	12"	11.95	10.79	8.65	6.45
189886EF	NMB	3610KL-05W-B30	24	3.63 x 3.63 x 1.00	40.6	Ball	87	2.1	UL/CSA/VDE	34	12"	7.95	6.39	4.79	3.35
153411EF	Sunon	KD2412PMB2-6A	24	4.68 x 4.68 x 1.50	98	Ball	230	5.5	UL/CSA/TUV	36.5	12" <del>\$14.95</del>	11.95	10.79	9.69	8.75
175468EF	NMB	5920PL-07W-B30	48	6.75 x 5.90 x 1.50	210	Ball	400	14.4	UL/CSA	51	12.5"	7.59	6.85	6.15	5.55

1 134586EF: Blower type fan 2 16993EF/172460EF: Replacement for the PC/XT computer power supply fan 3 185826EF: Speed sensor  
† 162739EF: Temperature control 50°C, 3 leads \* Manufacturers & specifications may vary

129 More @ [www.Jameco.com/Fan](http://www.Jameco.com/Fan)

## Heat Sinks, CPU Heat Sinks and Fans

### TO-3 Heat Sink

- Traditional design
- Black anodized aluminum
- 4.8"L x 1.5"W x 1.3"H



Part No.	Product No.	Type	1	10	100
16512EF	DUDE4	TO-3 ....	\$2.95	\$2.75	\$2.49

### TO-3 Heat Sink

- Uses less board space
- Ideal for 0.5" centering between boards
- Spacers not included
- 8 Watts
- 1.9"L x 1.4"W x 1.3"H



Part No.	Product No.	Type	1	10	100
151546EF	635-125B2	TO-3 ....	\$ .99	\$ .89	\$ .67

### TO-220 Heat Sink

- Black anodized aluminum
- 0.75"L x 0.52"W x 0.38"H
- 2 Watts

Thermalloy

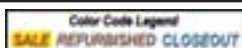


Part No.	Product No.	Type	1	10	100
158051EF	THM6078	TO-220 ....	\$ .39	\$ .35	\$ .29

### Heat Sink Compound

Silicone-based grease that improves transfer of energy across the metal to metal interface between transistor or rectifier to heat sink.

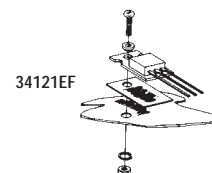
Part No.	Product No.	Weight	1	10	100
167249EF	THM250	2 oz. ....	\$8.95	\$7.95	\$6.95



### Heat Sink Mounting Kits

- TO-3 and TO-220 heat sink insulator assemblies
- 10 kits per pack

Part No.	Type	Description	1	10	100
34121EF	TO-220	5-piece kit .....	\$3.95	\$3.55	\$3.19
34139EF	TO-3	12-piece kit <del>\$4.95</del>	3.95	3.59	3.25



### CPU Heat Sinks and Fans

- Excellent for avoiding CPU overheating during extended system on-time
- High efficiency cooling fans
- Easy installation – just snap it in

SALE



206244EF



196242EF



181278EF



118092EF

Part No.	Description	Size (H" x W" x D")	Agency Approvals	1	10	50	100
206244EF	Heat sink w/ dual fan slot (SECC 2)	5.25 x 1.95 x 1.30	CE	\$12.95	\$11.65	\$10.49	\$9.49
196242EF	Heat sink w/ fan for socket 7 (ATX)	2.26 x 2.12 x 1.07	UL/CE/TUV	9.95	8.95	7.95	6.95
181278EF	Heat sink w/ fan for socket 7 (ATX)	2.12 x 2.05 x 1.67	UL/CE/CSA <del>\$9.95</del>	8.49	7.65	6.89	6.19
118092EF	Heat sink w/ fan for 586 CPU w/ snap	2.18 x 2.30 x 1.00	UL/CE/TUV	3.95	3.19	2.39	1.69

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## Scott Edwards Electronics, Inc.

Mini SSC II Module  
(Serial Servo Controller)

- Controls 8 pulse-proportional servos
- Receives serially at 2400 or 9600 baud
- Module is addressable, thus allowing two units to share the same line to control a total of 16 servos
- Connections to serial input can be established using modular adapter from DB9 to RJ11 (P/N 114737EF, pg 83)
- Size (PCB): 1.9"L x 1.4"W • One-year warranty



Part No.	Description	1	10
151001EF	Serial servo controller module..	\$43.95	\$41.79

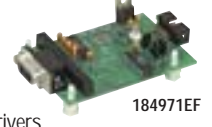
More Controllers @ [www.Jameco.com](http://www.Jameco.com)See our website for  
the complete  
selection.

## Industrial Motion Controllers for Brush, Brushless and Stepper Motors

All JR Kerr Automation Engineering controllers include integrated power amplifiers. Up to 32 controllers can be daisy-chained from a single full-duplex RS-485 port. See P/N 184971EF for RS-232 to RS-485 adapter.

- 185009EF:** • For 3-phase brushless motors with hall effect sensors or conventional DC brush-type motors
- High current amplifier:** 7A continuous, 10A peak, 12 to 48VDC supply
- 184971EF:** • Lets you operate the controllers from any standard RS-232 port
- 184997EF:** • Integrated indexer and driver for 2 or 4 phase stepper motors
- Full/half step bipolar chopper drive, 2A per phase, 7.5 to 46VDC supply
- Trapezoidal position profiling, velocity mode, up to 50,000 steps per second
- Limit switch inputs, general purpose outputs, step/dir outputs for use with external drivers

Part No.	Description	Size (L" x W" x H")	1	10
185009EF	PIC-SERVO 3PH board for brush or brushless motors	3.1 x 3.1 x 1.0	\$ 239.95	\$215.95
184971EF	Z232-485 serial port adapter	3.1 x 2.1 x 0.5	59.95	53.95
184997EF	PIC-STEP motor control board	3.1 x 2.1 x 0.9	159.95	143.95



## 12VDC Continuous Tubular Push and Pull Solenoids

- 12VDC nominal voltage continuous
- Life expectancy: 2,000,000 cycles



142463EF

163803EF  
Was \$9.95

Part No.	Type	Coil Res. (±10%)	Power Consum.	Holding Force (lbs. @ 20°C)	Wires (in.)	Size (ins.) (L x Dia.)	Shaft Dia. (in.)	Wt. (lbs.)	Pricing		
									1	10	100
163803EF*	Push	42.8Ω	3.4W	0.75	9.0	2.00 x .60	0.156	0.10	\$8.95	\$7.89	\$7.09
142463EF	Pull	36Ω	4.0W	0.63	2.0	1.63 x .43	0.150	0.04	5.95	5.35	4.79

\* Manufactured by Guardian (A420-067074-1)

## Bipolar and Unipolar Stepper Motors

- Excellent for precision control
- Can be operated in forward/reverse mode
- See website for compatible power supplies

SALE

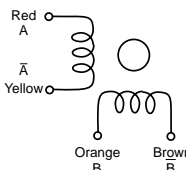
117954EF  
(Fig. 1)173180EF  
(Fig. 2)213321EF  
(Fig. 3)

Part Number	Mfr. Cross Ref. No.	Fig.	Step Angle	No. of Phases	Drive System	Volt. (VDC)	Phase Resis. (Ohms)	Curr. (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space Diagonal (in.)	Mounting Holes (in.)	Shaft Dia. (in.)	Shaft Length (in.)	Motor Dia. (in.)	Motor Height (in.)	Pricing			
																		1	10	50	
117954EF	LB82773-M1	1	7.5°	2	Bipolar	5	6	800	7	100	1080	2.60	1.95	0.250	0.75	2.25	1.00	\$4.29	\$3.89	\$3.09	
166705EF	PM42S-096	1	3.8°	4	Unipolar	12	84	140	16	60	450	1.95	0.13	0.117	0.40	1.66	1.64	3.95	3.39	2.55	
164056EF	M82101-P1	1	7.5°	3	Unipolar	5	20	255	5	9	94	1.4	0.13	0.078	0.35	1.00	0.46	1.85	1.69	1.55	
173180EF	30BYJ02AH <sup>1</sup>	2	.09°	4	Unipolar	12	200	60	49.5	400	400	1.42	0.14	0.194	0.36	1.18	.68	12.99	11.69	10.49	
213321EF	35BY48-27	3	7.5°	4	Unipolar	12	15	800	68	90	460	1.96	0.13	0.078	0.25	1.38	0.83	\$14.95	12.95	11.69	10.49

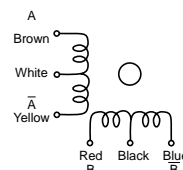
<sup>1</sup> 173180EF: Motor step angle 7.5°; Gear ratio 85.25:1

## GBM Bipolar and Unipolar Stepper Motors

- Bearing type: ball
- Dielectric strength: 500V, 50Hz/minute
- 18" lead wires
- Step angle: 1.8°
- Ambient temperature: -10°C to +55°C
- Insulation resistance: 100MΩ @ 500VDC
- Use P/N 161998EF, see website for shaft coupler

GBM is an ISO-9001  
Certified Company

Bipolar (Fig. 1)



Unipolar (Fig. 2)



NEMA 17 (155459EF)



NEMA 23 (162026EF)

Part Number	Product Number	Fig.	NEMA Form	No. of Phases	Drive System	Voltage (VDC)	Phase Resistance (Ohms)	Current (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space Diagonal (in.)	Mounting Holes (in.)	Shaft Diameter (in.)	Shaft Length (in.)	Motor Diameter (in.)	Motor Height (in.)	Weight (lbs.)	Pricing		
																			1	10	50
155459EF	42BYG023*	1	17	2	Bipolar	12	30	400	36	220	2,100	1.73	0.1	0.197	0.6	1.7	1.3	0.5	\$17.95	\$16.29	\$14.59
162026EF	57BYG084	2	23	4	Unipolar	12	20	600	22	725	6,000	2.65	0.2	0.250	1.0	2.2	2.0	1.3	26.95	24.29	21.85

\* Dual shaft

## 3-12VDC Motors

SALE

star motor



154915EF



177498EF



181964EF

34 More Motors @ [www.Jameco.com](http://www.Jameco.com)  
Jameco also carries Vibrator and Geared Motors.



Part Number	Manufacturer Cross Reference No.	Manufacturer	Efficiency	Nominal Voltage (VDC)	Voltage Range (VDC)	@ Maximum Efficiency			Terminal Type	Shaft Dia.	Shaft Length	Size (D" x L")	Pricing		
						Current (Amps)	RPM	Torque (g-cm)					1	10	100
154915EF	ST-130-12240 <sup>1</sup>	Star Motor	55	3	1.5-3	0.170	3588	7.4	0.09/solder	0.08"	0.37"	0.79 x 1.13	\$1.29	\$1.09	\$ .84
177498EF	RC280RA-2485	Mabuchi Motor	57	7.2	3-14	1.180	14260	33.3	11"/solder	0.08"	0.43"	0.95 x 1.20	1.75	1.55	1.39
181964EF	NF203G12	Johnson Electric	—	12	9-14	0.030	5000	—	0.07/solder	0.08"	0.57"	0.95 x 1.20	1.55	1.29	.99

<sup>1</sup> Use bushing P/N 162392EF, pg 103



## 12 VDC Reversible Gear Head Motors

- Solder-type terminal
- High torque construction
- Oil bearing design for long service life
- Insulation resistance: 10MΩ
- Dielectric strength: 300VDC



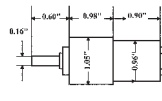
167038EF



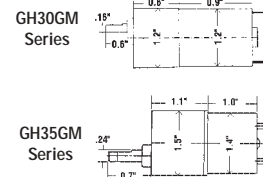
153437EF



155011EF



HN27GD Series



### HN27GD Series

Part Number	Product Number	Rated Voltage	Operating Range (VDC)	No Load		Started Torque (g-cm)	Gear Ratio	Gear Case Size Dia. x Lgth (in.)	Motor Size Dia. x Lgth (in.)	Shaft Size Dia. x Lgth (in.)	Pricing		
				Current (mA)	Speed (rpm)						1	10	50
167038EF	GH12-0953Y	12	4.5 - 24	45	14	1200	188:1	1.0 x 0.9	1.1 x 1.0	.16 x .60	\$16.49	\$14.85	\$13.39

### GH30GM Series

153437EF	GH12-1045Y	12	3.0 - 12	35	15	800	200:1	0.9 x 1.0	1.1 x 0.6	.16 x .70	\$18.95	\$17.09	\$15.35
162190EF	GH12-1324Y225	12	4.5 - 12	65	225	700	30:1	1.0 x 0.9	1.1 x 0.6	.16 x .70	16.95	15.25	13.75

### GH35GM Series

155011EF	GH12-1926	12	4.5 - 12	55	2	15000	3000:1	1.3 x 0.9	1.5 x 1.1	.23 x .90	\$21.95	\$19.79	\$17.79
155820EF	GH12-1830Y-P	12	4.5 - 12	50	4.5	13000	1000:1	1.3 x 0.9	1.5 x 1.0	.23 x .90	21.95	19.79	17.79
155838EF	GH12-1641T-L	12	3.0 - 12	65	20	10000	270:1	1.3 x 0.9	1.5 x 0.8	.23 x .90	23.95	21.59	19.45
152910EF	GH12-1926Y	12	4.5 - 12	48	44	11800	100:1	1.3 x 1.0	1.5 x 0.7	.24 x .90	21.95	19.75	17.75
151440EF	GH12-1632TI	12	4.5 - 12	75	69	11000	100:1	1.3 x 0.9	1.5 x 0.7	.23 x .90	21.95	18.55	16.69
161381EF	GH12-1634T	12	4.5 - 12	111	200	3600	30:1	1.3 x 0.9	1.4 x 0.7	.23 x .90	21.95	19.79	17.79
164785EF	GH12-1640Y	12	4.5 - 24	45	300	800	10:1	1.3 x 0.9	1.4 x 0.7	.23 x .90	23.95	21.59	19.45

## Open-Frame Switching DC Power Supplies

### SKYNET 10-Watt

- Output voltage: +5VDC @ 2A
- Input voltage: 115/230VAC @ 50-60Hz
- Input connector: 5-position 3-pin 0.156" male locking headers
- Mating input conn.: P/N 104723EF (see web)
- Output connector: 2-position 0.156" male locking headers
- Mating output connector: P/N 176743EF (web)

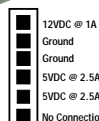


Part No.	Product No.	1	10	25
184866EF	SNP-0502-B	\$12.95	\$11.69	\$10.49

### SUPER MAC 24.5-Watt

- Output voltage: +5V @ 2.5A
- +12V @ 1A
- Input voltage: 100-240VAC @ 50-60Hz
- 2A @ 250V fuse on board
- Mating input conn.: P/N 104432EF (3-position housing connector, see web)
- Mating output connector: P/N 104731EF (6-position housing connector, pg 44)

SALE



Part No.	Product No.	1	10	25
166967EF	U002512010	\$12.95	\$11.05	\$8.29

### 45-Watt Triple Outlet

- Output voltage: +5VDC @ 3.0A
- +12VDC @ 2.0A
- -12VDC @ 0.3A
- Input voltage: 90-264VAC @ 47-440Hz; 127-370VDC
- Mating input conn.: P/N 104432EF (3-position housing connector, see web)
- Mating output connector: P/N 104731EF (6-position housing connector, pg 44)



Part No.	Product No.	1	10	25
88401EF	U002512010	\$33.95	\$22.99	\$19.99

SALE

## 10 to 60-Watt Switching Power Supplies

Part Number	Mfr.	Product Number	Power (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector (Mating Connector)	Output Connector (Mating Connector)	Certification	Size L" x W" x H"	Weight (lbs.)	Pricing		
											1	10	25
184866EF	Skynet	SNP-0502-B*	10	+5/2	115/230 @ 50-60	.156" M header (P/N 104723EF, see web)	.156" M header (P/N 176743EF, see web)	UL/CUL/TUV	4.4 x 1.6 x 0.8	0.2	\$12.95	\$11.69	\$10.49
166967EF	Super Mac	U002512010*	24.5	+5/2.5, +12/1	100-240 @ 50-60	.156" M header (P/N 104432EF, see web)	.156" M header (P/N 104731EF, pg 44)	UL/CSA/TUV	3.7 x 2.5 x 1.2	0.4	12.95	11.05	8.29
190086EF	Artesyn	NFS407608	40	+5/3, +12/2, -12/0.35	85-264 @ 47-440	.156" M header (P/N 104432EF, see web)	.156" M header (P/N 104731EF, pg 44)	UL/CSA/VDE/CE	5.0 x 3.0 x 1.2	0.5	49.95	44.99	40.49
163985EF	Samsung	PSPL430201A	43	+5/5, +12/1.5	100-120 @ 50-60	3 prong receptacle (P/N 38050EF, see pg 35)	(P/N 42067EF, 114930EF, P/N 78326EF, pg 87)	UL/CUL	6.1 x 2.1 x 1.0	0.6	14.95	12.75	9.59
88401EF	Mean Well	PT45B*	45	+5/3, +12/2, -12/0.3	90-264 @ 47-440	.156" M header (P/N 104432EF, see web)	.156" M header (P/N 104731EF, pg 44)	UL/CUL/TUV/CE	5.0 x 3.0 x 1.6	0.5	33.95	22.99	19.99
169050EF	Autec	UPS50-2002	51	+5/3, +12/3	90-264 @ 47-440	.156" M header (P/N 104432EF, see web)	.156" M header (P/N 104731EF, pg 44)	UL/CSA/TUV	5.0 x 3.0 x 1.9	0.7	11.95	10.75	9.69
171731EF	Delta	DPS-60MPB	60	+3.3/8, +5/9, +12/1, -12/0.2	90-270 @ 47-63	3 prong receptacle (P/N 38050EF, see pg 35)	.156" M header (12-pin housing incl.)	UL/CUL/TUV	5.8 x 3.3 x 1.4	1.0	7.95	6.79	5.09

\*See photo above



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## 65-Watt Dual Output

- Input voltage: 90-264VAC @ 47-440Hz; 120-370VDC
- DC voltage adjustment: CH1: +10, -5%
- Mating input connector: P/N 104432EF, see web
- Mating output connector: P/N 104731EF, pg 44
- Size: 5.0"L x 3.0"W x 1.5"H



Part No.	Product No.	Watts	Output	1	10	25
194896EF	PD65B	65.5	5VDC @ 3.5A 24VDC @ 2A	\$35.95	\$23.99	\$20.99

## 65-Watt Single Output

- Input voltage: 90-264VAC @ 47-440Hz; 120-370VDC
- Mating connectors: P/N 104432EF (see web) & P/N 104731EF, pg 44
- No minimum load required
- Size: 5.0"L x 3.0"W x 1.6"H • Weight: 0.6 lbs.



Part No.	Product No.	Watts	Output	1	10	25
148638EF	PS-65-12	62.4	12VDC @ 5.2A	\$33.95	\$22.99	\$19.99

## 25-Watt Single Output

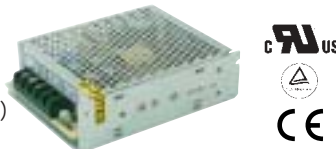
- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- No minimum load required
- Size: 3.9"L x 3.8"W x 1.4"H • Weight: 0.8 lbs.



Part No.	Product No.	Watts	Output	1	10	25
123246EF	S-25-5	25.0	5VDC @ 5.0A	\$43.95	\$27.99	\$23.99
123254EF	S-25-12	25.2	12VDC @ 2.1A	43.95	27.99	23.99
123271EF	S-25-24	26.4	24VDC @ 1.1A	43.95	27.99	23.99

## 40-Watt Single Output

- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- No minimum load required
- Size: 5.1"L x 3.9"W x 1.5"H
- Weight: 1.0 lb.



Part No.	Product No.	Watts	Output	1	10	25
123297EF	S-40-12	42	12VDC @ 3.5A	\$49.95	\$31.99	\$27.99

## 60-Watt Single Output

- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- No minimum load required
- Size: 6.3"L x 3.8"W x 1.5"H
- Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	25
123334EF	S-60-12	60	12VDC @ 5A	\$57.95	\$35.99	\$30.99
123342EF	S-60-15	60	15VDC @ 4A	57.95	35.99	30.99
123351EF	S-60-24	60	24VDC @ 2.5A	57.95	35.99	30.99

## 60-Watt Dual Output

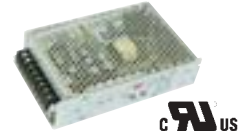
- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Min. load: all outputs at 10% of rated load
- Weight: 1.2 lbs.
- Size: 6.3"L x 3.8"W x 1.5"H



Part No.	Product No.	Watts	Output	1	10	25
123457EF	D-60A	56	5VDC @ 4A, 12VDC @ 3A	\$60.95	\$37.99	\$32.99
123465EF	D-60B	58	5VDC @ 3A, 24VDC @ 1.8A	60.95	37.99	32.99

## 60-Watt Quad Output

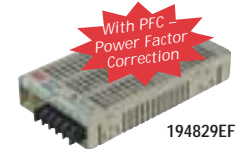
- Input voltage: 85-264VAC @ 47-63Hz; 120-370VDC
- Line regulation: 0.5%-1.0%
- Ripple and noise: 100-120mV peak to peak
- DC voltage adjustment: CH 1: +10, -5%
- Minimum load: all output at 10% rated load
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Size: 6.3"L x 3.9"W x 1.5"H • Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	25
147045EF	Q60B	60	+5VDC @ 5.5A; -5VDC @ 0.5A +12VDC @ 2A; -12VDC @ 0.5A	\$65.95	\$40.99	\$35.99

## 75-Watt Single Output

- Input range: 85-264VAC @ 47-63Hz; 120-370VDC
- Ripple and noise: 80mV -100mV peak to peak
- DC voltage adjustment: +10%, -5%
- Soft start-circuit, limiting AC surge current
- Line regulation:  $\pm 5\%$
- Mating input/output conn.: P/N 103587EF, spade terminal (see web)
- Size: 7.0"L x 3.9"W x 1.3"H • Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	25
194829EF	SP75-5	75	5VDC @ 15A	\$75.95	\$55.49	\$48.99
194837EF	SP75-12	75	12VDC @ 6.3A	75.95	55.49	48.99

## 120-Watt Quad Output

- Input voltage: 88-132VAC or 176-264VAC @ 47-63Hz
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Switch selectable input
- Minimum load: all outputs at 10% of rated load
- Size: 8.0" x 4.4"W x 2.0"H • Weight: 2.0 lbs.



Part No.	Product No.	Watts	Output	1	10	25
132370EF	Q-120D	124	+5VDC @ 8A; +24VDC @ 2A +12VDC @ 2A; -12VDC @ 1A	\$82.95	\$57.99	\$50.99

## 150-Watt Single Output

- Input voltage: 88-132VAC/176-264VAC switch selected
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Switch selectable input
- No minimum load required
- Size: 7.8"L x 4.3"W x 2.0"H • Weight: 1.8 lbs.



Part No.	Product No.	Watts	Output	1	10	25
123431EF	S-150-15	150	15VDC @ 10A	\$76.95	\$46.99	\$40.99
123449EF	S-150-24	156	24VDC @ 6.5A	76.95	46.99	40.99
167345EF	S-150-48	154	48VDC @ 3.2A	76.95	46.99	40.99

## MTBF Table

Product Number	MTBF (Hours) @ Full Load/40°C	Product Number	MTBF (Hours) @ Full Load/40°C	Product Number	MTBF (Hours) @ Full Load/40°C
PD-65	288,000	Q-60	284,000	S-240	179,000
PS-65	300,000	SP-75	208,800	SP-300	168,000
S-25	330,000	Q-120	261,000	S-320	188,000
S-40	314,000	S-150	286,000	SP-500	133,000
S-60	316,000	SP-150	191,000	PSP-500	130,000
D-60	301,000	SP-200	183,000		

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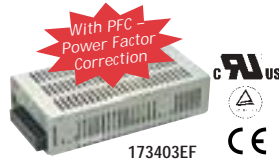
## Mean Well Authorized Distributor

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• High efficiency • Low output ripple • 100% burn-in • Short circuit, overload over-voltage protected • UL approved • MTBF rated • Two-year warranty

### 150-Watt Single Output

- Input voltage: 85-264VAC @ 47-63Hz
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Overload, overvoltage & short circuit protection
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- No minimum load requirement
- 100% full load burn-in test
- Size: 7.8"L x 3.9"W x 2.0"H



Part No.	Product No.	Watts	Output	1	10	25
173411EF	SP-150-15	150	15VDC @ 10A	\$97.95	\$69.99	\$61.99
173403EF	SP-150-24	150	24VDC @ 6.3A	97.95	69.99	61.99

### 200-Watt Single Output

- Input voltage: 85-264VAC @ 47-63Hz; 120-370VDC
- Line regulation:  $\pm 5\%$  • MTBF table, pg 32
- Ripple & noise: 100mV – 150mV peak to peak
- DC voltage adjustment: CH1: +10, -5%
- Soft-start circuit, limiting AC surge current
- Mating input/output connector: P/N 103587EF, spade terminal (see web) • Wt.: 1.9 lbs.



Part No.	Product No.	Watts	Output	1	10	25
194773EF	SP-200-12	200.4	12VDC @ 16.7A	\$109.95	\$77.99	\$67.99

### 240-Watt Single Output

- Input voltage: 88-132VAC/176-264VAC automatic switching
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Automatic fan controls internal temperature
- Size: 8.0"L x 3.7"W x 2.6"H • Weight: 2.5 lbs. • MTBF table, pg 32



Part No.	Product No.	Watts	Output	1	10	25
137656EF	S-240-24	240	24VDC @ 10A	\$103.95	\$91.99	\$80.99

### 288 to 300-Watt Single Output

- Input voltage: 100 to 240VAC
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Automatic fan controls internal temperature
- Over-temperature protected
- Weight: 2.6 lbs. • MTBF table, pg 32



Part No.	Product No.	Watts	Output	1	10	25
137390EF	SP-300-12	288	12VDC @ 24A	\$185.95	\$123.99	\$109.99
137402EF	SP-300-24	300	24VDC @ 12.5A	185.95	123.99	109.99

### 320-Watt Single Output

**SALE**

- Input voltage: 88-132VAC/176-264VAC
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Automatic on/off cooling fan • MTBF table, pg 32
- Size: 8.5"L x 4.5"W x 2.0"H • Weight: 2.5 lbs.



Part No.	Product No.	Watts	Output	1	10	25
196656EF	S-320-24	320	24VDC @ 12.5A	<del>\$129.95</del> \$124.95	\$83.49	\$73.49

### 480-Watt Single Output

- Input voltage: 100-240VAC @ 50/60Hz
- Built-in remote control
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Short circuit, overload, over voltage and over temperature protection
- Cooling fan (temperature sensing) • Remote voltage sensing
- MTBF table pg 32 • Size: 7.3"L x 4.8"W x 3.8"H • Weight: 4.2 lbs.



Part No.	Product No.	Watts	Output	1	10	25
147053EF	SP500-24	480	24VDC @ 20A	\$259.95	\$173.99	\$152.99

### 500-Watt Single Output

#### With Parallel Operation

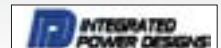
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Input voltage: 90-264VAC @ 47-63Hz; 127-370VDC
- Ripple and noise: 200mV – 240mV peak to peak
- Parallel/series operation can reach 3KW
- Current sharing/remote control/remote sense
- Line regulation:  $\pm 2\%$  • MTBF table, pg 32
- Mating input/output connector: P/N 103587EF, spade terminal (see web)
- Size: 11.0"L x 5.0"W x 2.5"H • Weight: 5.5 lbs.



Part No.	Product No.	Watts	Output	1	10	25
190713EF	PSP-500-12	498	12VDC @ 41.5A	\$261.95	\$210.99	\$196.99
190721EF	PSP-500-24	500	24VDC @ 20.8A	261.95	210.99	196.99

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**SALE**

### 70 to 350-Watt Enclosed Switching DC Power Supplies

**SALE**

Part Number	Manufacturer	Product Number	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector/Cord	Output Connector	Certification	Size L" x W" x H"	Wt. (lbs.)	Pricing		
											1	10	50
205698EF	Volgen	PRK70U-1515	70	+5/-5; +15/-2; -15/1	100/120 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CSA	8.7 x 4.1 x 2.8	1.0	\$24.95	\$22.49	\$20.25
205840EF	Volgen	ESK80U-1515	74	+5/-10; +15/-0.8; -15/0.8	115/220 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CSA	8.7 x 5.0 x 1.5	1.9	24.95	22.49	20.25
203529EF	ETA	WRC48SX-U	75	+48/1.6	85-264 @ 47-440	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CSA/VDE/CE	6.9 x 3.7 x 1.5	1.4	24.95	22.49	22.49
199515EF	GlobTek	RT-3S150-24	150	+24/6.5	115/230 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CE	7.9 x 4.3 x 1.9	1.8	59.95	47.95	35.95
205971EF	Volgen	MRE-156R6U	100	+15/6.6	115/240 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CSA/TUV	8.8 x 3.9 x 2.0	1.2	31.95	28.79	25.89
223992EF	Volgen	SP100U-24S	108	+24/4.5	100-230 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CUL/TUV/CE	7.7 x 4.4 x 1.5	1.9	31.95	28.75	25.89
205663EF	SSI	SQV140-1333	140	+5/-20; +15/5; +15/3; -15/3	120/240 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	UL/CSA/TUV	10.5 x 5.0 x 2.5	4.6	16.49	14.99	13.65
196461EF	TODD	MAX3541205AC	350	+5/-50; +12/12; -5/2; -12/4	115/230 @ 50-60	Screw terminal (P/N 103587EF, see web)	Screw terminal (P/N 103587EF, see web)	TUV	9.0 x 5.0 x 2.5	2.0	47.95	43.19	38.89

**276-Watt Precision Regulated Linear Power Supply**

- Output current: 20A
- Illuminated rocker switch
- Short circuit protection
- Output terminals: see web for mating cigarette plugs and page 65 for mating banana terminal plugs
- Fuse protected • Output: 13.8 VDC
- Input voltage: 115VAC @ 60Hz

Includes: heavy duty 5'8" 3-prong power cord



Part No.	Model No.	Output Terminals	Size (L" x W" x H")	Wt. (lbs.)	1	10	25
138675EF	52-192012	Banana	10.0 x 7.8 x 4.4	15.9	\$109.95	\$99.95	\$89.95

**25-Watt DC-to-DC Converters**

- Input voltage: 9.2VDC-18VDC
- Built-in EMI filter, low ripple noise
- Size: 3.9"L x 3.9"W x 1.5"H
- Voltage output adjustable
- Short-circuit, over-voltage and overload protection
- Input/output connector: screw terminals
- Mating connectors: P/N 103587EF or P/N 103595EF, see web



Part No.	Product No.	Output	1	10	25
175804EF	SD25A12	12V @ 2.1A	\$40.95	\$30.99	\$28.99
175812EF	SD25A24	24V @ 1.1A	40.95	30.99	28.99

**3 and 15-Watt DC-to-DC Converters**

- Short-circuit/over-current protection
- One-year warranty

Mean Well is an ISO-9001 Certified Company

155918EF



Fig. 1

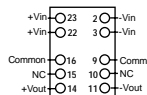
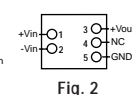


Fig. 2



Part Number	Product Number	Fig.	Power (W)	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Current (mA)	Ripple p-p (mV)	Pins	Size L" x W" x H"	Pricing		
										1	10	25
155918EF	DCW03A05	1	3	9-18	+5/-5	300	100	8	1.2 x 0.7 x 0.5	\$20.95	\$18.89	\$16.99
161701EF	DCW03A12	1	3	9-18	+12/-12	125	100	8	1.3 x 0.8 x 0.5	20.95	18.89	16.99
155707EF	SKE15A12	2	15	9-18	+12	1,250	60	4	2.0 x 2.0 x 0.4	34.95	31.19	28.15
155694EF	SKE15A24	2	15	9-18	+24	625	80	4	2.0 x 2.0 x 0.4	34.95	31.49	28.15

**21 and 300 Watt DC-to-DC Converters**

- Over-temperature, over-voltage and short-circuit protection

**SALE**

109276EF



206033EF

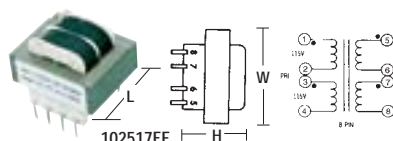
125 More Converters  
@ [www.Jameco.com](http://www.Jameco.com)

Part Number	Product Number	Power (W)	Input Voltage	Input Range (VDC)	Output Voltage (VDC)	Output Current (A)	Ripple p-p (mV)	Pins	Size L" x W" x H"	Pricing		
										1	10	50
109276EF	AA9090A	21	16	0-20	+5.1/+12.6/-26	3.75/0.1/0.4	500/100/200	32	3.6 x 1.6 x 0.8	\$6.95	\$5.95	\$4.75
206033EF	PD300-300-PC	300	300	200-300	+15	20	150	11	4.6 x 2.4 x 0.5	39.95	35.99	32.39

**Power Transformers****Split-Bobbin Power Transformers**

Non-concentrically wound with primaries and secondaries side-by-side providing low capacitive coupling.

- Primary: 115/230VAC, 50-60Hz • PC terminal pin spacing for accurate placement



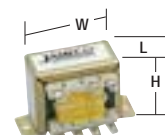
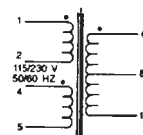
Part Number	Mfr. Cross Ref. No.	Triad Cross	Input Voltage	VA Cap	Individual Output	Parallel Output	Series Output	Dimensions			Wt. (lbs.)	Pricing	
								L"	W"	H"		1	10
102517EF	XFR1602SB†	FS16150	115/230	2.4	8V @ .15A	8V @ .30A	16VCT @ .15A	1.17	1.38	1.20	0.3	\$6.95	\$6.25
102592EF	XFR2405SB	FS24500	115/230	12.0	12V @ .50A	12V @ 1.0A	24VCT @ .50A	1.58	1.90	1.46	0.7	8.79	7.95

† Manufacturer and Product number may vary

**Quick Connect Power Transformer**

- Quick connect transformers are bobbin wound for smaller size and reduced electrostatic shielding requirements
- Terminals: quick connect, solder • Input voltage: 115/230VAC, 50-60Hz

Part Number	Mfr. Cross Ref. No.	Triad Cross	Input Voltage	Output Voltage	VA Cap	Size of Connect	Dimensions			Weight (lbs.)	Pricing	
							L"	W"	H"		1	10
101864EF	XFR2424Q	FD724	115/230VAC	24VCT @ 2.4A	57.6	0.187"	1.87	2.70	2.25	1.7	\$11.95	\$10.79

**115VAC and 115/230VAC Power Transformers**

Power transformers have both single and dual voltage input and center tapped outputs. This makes them the perfect choice for power supply design or for use in transformer, rectifier, and filter circuits.

- Primary: 115VAC or 115/230VAC, 50-60Hz \* Center tap

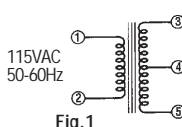


Fig. 1

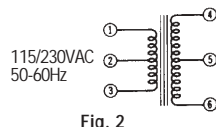


Fig. 2

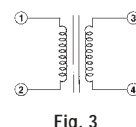
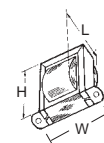


Fig. 3



29225EF

Part Number	Mfr. Cross Ref. No.	Triad Cross	Primary			VA Cap	Secondary			Lead Type	Fig.	Dimensions			Wt. (lbs.)	Pricing			
			Color	Code			Voltage	Color	Code			L"	W"	H"		1	10	100	
102162EF	XFR6102	F314X	Black	Yellow*	Red	7.6	6.3VCT @ 1.2A	White	Black*	White	Wire	2	1.56	1.96	1.67	0.8	\$8.49	\$7.65	\$6.89
102111EF	XFR2410	F346X	Black	Yellow*	Red	24.0	24VCT @ 1A	White	Black*	White	Wire	2	2.22	2.33	1.97	1.5	8.95	8.09	7.25
29225EF	XFR122	F44X	Yellow	—	Yellow	25.2	12.6VCT @ 2A	Blue	Red*	Black	Wire	1	2.12	2.33	1.96	1.5	9.95	8.99	8.09
112512EF	XFR242N	F229X	Black	—	Black	48.0	24VAC @ 2A	White	—	White	Wire	3	1.75	2.75	2.25	1.8	9.79	8.85	7.95
102120EF	XFR124	F181U	Black	—	Black	50.4	12.6VCT @ 4A	White	Black*	White	Wire	1	2.53	3.08	2.61	2.7	12.95	11.69	10.49



## 120VAC to 120VAC Isolated Transformer

### 300VA

- Input voltage: 120VAC @ 60Hz
- Input connector: 5.5' cord with 2-prong plug
- Output voltage: 120VAC @ 2.5A (isolated)
- Size: 4.2"H x 3.2"W x 4.6"D
- Weight: 7.0 lbs.

**SALE**


Part No.	Mfr. Cross Ref. No.	1	10	100
181315EF	ITR300	\$44.95	\$33.75	\$23.65

More Variable Transformers  
@ [www.Jameco.com](http://www.Jameco.com)

## AEEC 110VAC Variable AC Transformers

- Input voltage: 110VAC @ 60 Hz
- Power: 500 and 2000VA
- Output voltage: 0 to 130VAC
- Output analog voltmeter
- Input conn.: 3-prong plug w/ 5' cord
- Output conn.: 3-prong outlet type
- Lighted on/off power switch
- 169640EF: • 5A @ 250V fuse
- Size: 8.3"L x 6.5"W x 7.0"H
- Weight: 15.6 lbs.
- 169658EF: • 20A @ 250V fuse
- Size: 9.8"L x 8.0"W x 7.0"H
- Weight: 26.5 lbs.



Part No.	Description	1	10	50
169640EF	500VA transformer	\$84.95	\$76.49	\$68.85
169658EF	2000VA transformer	124.95	112.49	101.25

## 110/220VAC Variable AC Transformers

- Input: 110VAC or 220VAC
- Power: 500-2000VA
- Output: 0-240VAC
- Banana/screw input terminals
- Universal US/European output plugs
- Lighted on/off power switch



Part No.	Fuse	Size (L" x W" x H")	Wt. (lbs.)
121275EF	3A/250V (P/N 69438EF)	5.3 x 7.3 x 7.0	10.4
129007EF	5A/250V (P/N 10401EF)	9.4 x 6.5 x 7.7	14.8
152581EF	10A/250V (P/N 69462EF)	9.0 x 7.0 x 7.7	19.8

Part No.	Description	1	10	50
121275EF	500VA transformer....	\$79.95	\$69.95	\$62.95
129007EF	1000VA transformer ..	164.95	148.49	133.65
152581EF	2000VA transformer..	174.95	158.45	139.95

## Power Entry Filters

- Frequency: 50/60Hz


**SALE**


Fig. 1 (146907EF)



40601EF

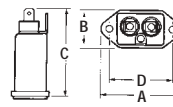


Fig. 2 (Fast-on Terminals)

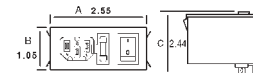


Fig. 3 (Cut out)

Part Number	Mfr. Cross Ref. No.	Corcom Cross	Description	Fig.	Current (Amps)	Voltage (VAC)	Terminal Voltage	Agency Approvals	Terminal Size	Dimension (inches)				Pricing			
										A	B	C	D	1	10	100	500
146907EF	03DENG3B*		Power entry filter (snap-in)	1	3	250	fast-on	UL/CSA/VDE	.25"	1.25	0.95	2.23	N/A	\$4.95	\$4.49	\$3.59	\$2.69
40601EF	03AE1*	3EF1F	Power entry filter, straight (flanged)	2	3	250	fast-on	UL/CSA/VDE	.25"	1.97	0.90	2.16	1.58	5.95	4.79	3.59	2.55
212206EF	A6-12S10E		Pwr. entry filter, fused w/switch (snap-in)	3	6	250	fast-on	UL/CSA/VDE	.25"	2.55	1.05	2.44	N/A	9.95	8.95	7.95	6.95

\* Manufacturer may vary

## Computer and Power Cords

- Molded connectors
- Excellent resistance to jacket abrasion
- Temperature: -20°C to +60°C
- Voltage rating: 300 volts

AWG	Volts	Amps	VA
18	125	10	1250
16	125	12	1500
14	125	15	1875



Configuration 8 Laptop Power Cord (Fig. 1)



Power Cord w/ pigtail (Fig. 2)



RFI Power Cord (Fig. 3)



Right Angle Computer Power Cord (Fig. 4)



Hospital Grade Cord (Fig. 5)

Part Number	Mfr. Cross Reference No.	Description	Weight (lbs.)	Agency Approvals	Plug Fig.	Length	Color	AWG	Cord Type*	Pricing			
										1	10	100	250
189587EF	VW-1	2-conductor "8" style power cord for laptops and power supplies	.30	UL/CSA	1	6'	Black	18/2	SPT-2	\$2.95	\$2.49	\$2.15	\$1.79
37997EF	17236	3-conductor power cord with pigtail	.30	UL/CSA	2	6'	Black	18/3	SVT	2.79	2.32	2.11	1.99
38041EF	17249	3-conductor power supply cord	.37	UL/CSA	3	6'	Beige	18/3	SVT	3.49	3.15	2.79	2.49
38050EF	17250	3-conductor power supply cord	.36	UL/CSA	3	6'	Black	18/3	SVT	3.75	3.25	2.75	2.49
125541EF	17504	3-conductor power supply cord	.71	UL/CSA	3	6' 7"	Black	14/3	SJT	4.95	4.45	3.55	2.69
38076EF	17250R	3-conductor right angle power supply cord	.54	UL/CSA	4	6'	Black	18/3	SVT	3.49	3.15	2.85	2.55
115078EF	17006	3-conductor power cord w/ hospital grade male (green dot)	.84	UL/CSA	5	10'	Black	16/3	SJT	8.95	8.09	7.25	6.55

\* Thermoplastic Cord Jacket Type: Light duty; SPT-2 (Flat): Junior duty; SVT (Round): Light service; SJT (Round): Junior service

## International Step-Up/Step-Down Transformers

- Wide selection to meet your power requirements



Fig. 1



Fig. 2



Fig. 3

Part Number	Mfr. Cross Ref. No. *	Fig.	Primary Voltage	Secondary Voltage	Power (VA)	Dimensions			Wt. (lbs.)	Pricing		
						H"	W"	D"		1	10	100
99573EF	AC110V50	1/A	220VAC	110VAC	50	2.50	1.63	1.33	0.7	\$9.95	\$8.99	\$8.09
85016EF	AC110V300	3/A	220VAC	110VAC	300	3.50	3.05	3.95	4.8	27.95	24.95	22.49
111851EF	AC110V500	2/A	220VAC	110VAC	500	3.99	3.60	4.84	8.5	34.95	31.49	28.95
142906EF	AC110V1500	2/A	220VAC	110VAC	1500	5.25	4.50	5.75	15.2	79.95	71.95	64.95
85008EF	AC220V300	3/B	110VAC	220VAC	300	3.50	3.05	3.95	4.8	27.95	24.95	22.49

\* Manufacturer may vary



Fig. A Plug



Fig. B Plug



Output Plug



43 More Power Cords @ [www.Jameco.com](http://www.Jameco.com)

Look for Jameco's complete selection of  
International Power Cords.





Power cords – see page 35



Stripped Female

## AC/DC Table-Top Power Supplies

- Regulated and unregulated outputs (see "Output Plug")
- Input voltage: **Regulated:** 100-240VAC @ 50-60Hz  
**Unregulated:** 120VAC @ 50-60Hz

Polarity 1 (center negative)

Polarity 2 (center positive)



136565EF



155213EF



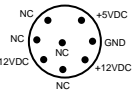
139096EF

Part Number	Mfr. Cross Reference No. ▲	Output			Output Plug ID x OD/Plug Type/Polarity	Power Indicator	Color	Size (L" x W" x H")	Cord (DC/AC)	Weight (lbs.)	Agency Approvals	Pricing		
		Volts (VDC)	Current (A)	Watts (W)								1	10	50
196218EF	GT210891005T3	5	2.0	10	2.1mm x 5.5mm female 2 (regulated)	No	Black	3.4 x 1.9 x 1.3	6' 1	0.4	UL/CSA/TUV/CE	\$19.95	\$17.95	\$16.15
169121EF	AD740U1050	5	4.0	20	2.5mm x 5.5mm female 2 (regulated)	No	Black	4.1 x 2.6 x 1.6	4' 1	1.4	UL/CUL/TUV/CE	<del>\$27.95</del> 24.95	22.49	19.95
136565EF	DDC1210P ↑	12	1.0	12	Stripped & Tinned	No	Black	3.2 x 2.2 x 1.9	6' 6'	1.2	—	13.95	12.59	11.39
140880EF	DC1215ST ↑	12	1.5	18	Stripped & Tinned	No	Black	3.1 x 2.1 x 1.9	6' 6'	1.5	UL	10.95	9.95	8.95
216531EF	KWM12F-P2MU	12	1.5	18	2.5mm x 5.5mm female 2 (regulated)	No	Black	4.0 x 1.9 x 1.5	6' 1	0.4	UL/CUL/TUV/CE	26.95	24.25	21.85
143714EF	DC1220F1 ↑	12	2.0	24	2.1mm x 5.5mm female 2	No	Black	3.8 x 2.8 x 2.3	6' 6'	2.2	—	14.95	13.49	12.19
155213EF	P40A-3P2JU	12	3.3	40	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.5 x 2.3 x 1.5	6' 6'	0.7	UL/CUL/TUV	34.95	31.49	27.95
155230EF	SPU50-3	12	5.0	60	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.5	6' 6'	1.3	UL/CSA/TUV	49.95	44.95	39.95
169076EF	808050-00	20	2.5	50	2.5mm x 5.5mm female 2 (regulated)	Yes	Black	6.7 x 3.3 x 2.3	6' 1	1.4	UL/CSA/TUV	22.95	18.39	13.79
139096EF	DC2412F1 ↑	24	1.2	29	2.1mm x 5.5mm female 2	No	Black	4.4 x 3.1 x 2.6	6' 6'	2.5	—	<del>\$19.95</del> 14.95	13.49	12.15
181884EF	P40A6P2J	24	1.66	40	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	4.1 x 2.6 x 1.4	6' 6'	0.7	UL/TUV/CE	33.95	30.59	27.55
161605EF	SPU50-6	24	2.5	60	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.6	1'9" 6'	1.3	UL/CSA/TUV	44.95	39.95	35.95
173665EF	DND-3005 ↑	30	0.5	15	2.5mm x 5.5mm female 2 (regulated)	No	Black	8.3 x 2.5 x 2.2	5'9" 3'2"	1.4	UL/CUL	13.29	11.99	9.59
172064EF	SPU50-9	48	1.25	50	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.7	6' 6'	1.3	UL/CSA/TUV	<del>\$49.95</del> 44.95	40.49	36.45

↑ 120VAC input only ▲ Manufacturer may vary ↑ Use P/N 38050EF (pg 35) power cord

## MOTOROLA 5.6-Watt Linear Wall Regulated DC Power Supply

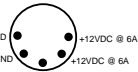
- Output voltage:  
+5VDC @ 500mA  
+12VDC @ 130mA  
-12VDC @ 130mA
- Input voltage:  
120VAC @ 60Hz
- Input conn.: 3-prong AC wall plug



Part No.	Product No.	1	10	50
154624EF	5712-305-4C3E	\$12.95	\$10.39	\$7.79

## ELPAC 72-Watt Table-Top Switching Power Supply

- Output voltage:  
+12VDC @ 6A
- Input voltage:  
95-250VDC @ 47-63Hz
- Input: 6' power cord (included)
- Mating output connector: 5-pin DIN female connector, P/N 180873EF, see web



Part No.	Product No.	1	10	50
182959EF	W7212	\$54.95	\$49.49	\$39.59

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Jameco carries a huge selection of Table-Top Power Supplies.  
See our website for more.

Part Number	Mfr. ▲	Product Number ▲	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector/Cord	Output Connector/Cord	Certification	Size L" x W" x H"	Weight (lbs.)	Type/Color	Mode†	Pricing		
													1	10	50
116089EF	Atari	C070042	5.0	+5/1	115 @ 60	2-prong/6' cord	7-pin DIN M/6'	UL	3.4 x 2.7 x 2.3	1.6	Table/Black	L	\$8.39	\$7.55	\$6.05
154624EF	Motorola*	5712-305-4C3E	5.6	+5/0.5, +12/0.13, -12/0.13	120 @ 60	3-prong wall plug	8-pin mini DIN M/6'	UL/CSA	2.9 x 2.6 x 1.9	1.2	Wall/Black	L	12.95	10.39	7.79
155651EF	Globelek	TR2V100MD8	12.2	+5/1, +12/0.3, -12/0.3	120 @ 60	3-prong/6' cord	8-pin mini DIN M/6'	UL	4.5 x 3.0 x 2.5	2.6	Table/Black	L Was \$24.95	9.69	8.69	7.79
190959EF	Mean Well	P25A13D	25.7	+5/2.5, +12/0.8, -12/0.3	100-240 @ 47-63	3-prong/6' cord	5-pin DIN M/6'	CUL/TUV/CE	4.1 x 2.6 x 1.4	1.1	Table/Black	S Was \$39.95	32.95	29.69	26.69
182959EF	Elpac*	W7212	72.0	+12/6	95-250 @ 47-63	3-prong/6' cord	5-pin DIN F/6'	UL/CSA/CE	6.2 x 3.8 x 2.6	2.5	Table/Black	S	54.95	49.49	39.59

\* See photo above † S = switching; L = linear ▲ Mfr. and Product Number may vary



101127EF



Female Male



## AC to AC Wall Adapters

- Input: 120VAC @ 60Hz
- Current rating up to 1.85A
- Plugs into standard 2-prong/3-prong 115V outlet
- See page 50 for wall adapters enclosures

We will change any power plug (see web) on any AC wall transformer listed (100 piece minimum)

SALE



185439EF



10102EF

Part Number	Mfr. Cross Reference No. ▲	Output Rating		Output Plug ID x OD (mm) Plug Type	Dimensions (in.) (±10%)			Output Cord Length	Weight (lbs.)	Agency Approvals	Pricing		
		Voltage	Current		H	W	D				1	10	50
101127EF	DFX10096B	7 VAC	1500 mA	2.5 mm x 5.5 mm female	1.88	2.20	1.95	7' 6"	0.8	UL/CSA	\$4.95	\$4.49	\$3.95
119204EF	A41090800	9 VAC	800 mA	2.1 mm x 5.5 mm female	2.55	1.91	1.7	6'	0.6	UL	<del>\$5.95</del> 4.69	4.25	3.79
112336EF	AC915F5	9 VAC	1500 mA	2.5 mm x 5.5 mm female	2.50	2.20	1.96	6'	0.9	UL	9.95	7.99	5.99
101258EF	41A12-500	12 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	6'	0.6	UL/CSA	<del>\$4.95</del> 4.59	4.15	3.65
10081EF	AC1210F1	12 VAC	1000 mA	2.1 mm x 5.5 mm female	2.56	2.39	1.99	6'	0.7	UL/CSA	4.95	4.49	3.99
100167EF	AC1210F5	12 VAC	1000 mA	2.5 mm x 5.5 mm female	3.20	2.41	2.00	6'	0.7	UL/CSA	4.95	4.49	3.65
171408EF	AC1405F1	14 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	6'	0.6	UL/CSA	4.95	4.49	3.95
185439EF	T5182200-A020G	18 VAC	1850 mA	2.1 mm x 5.5 mm right angle female	3.34	2.69	2.19	6'	1.7	UL/CSA	7.95	7.19	6.49
87581EF	AC2405F1	24 VAC	500 mA	2.1 mm x 5.5 mm female	2.50	2.24	1.92	6'	0.9	UL/CSA	<del>\$6.95</del> 4.95	4.49	3.99
140599EF	AC2410F1	24 VAC	1000 mA	2.1 mm x 5.5 mm female	3.00	2.20	1.90	6'	1.2	UL/CSA	8.95	8.09	6.49
10102EF	AC2410M3	24 VAC	1000 mA	3.5 mm male	3.00	2.20	1.90	6'	1.2	UL/CSA	7.95	7.19	6.45
176356EF	WP573024	24 VAC	1250 mA	2.1 mm x 5.5 mm female	3.36	2.67	2.20	5'8"	1.6	UL/CSA	10.49	9.45	8.55

▲ Manufacturer may vary





## AC to DC Wall Adapters

*Unregulated unless specified under "output plug"*

- Input: 120VAC @ 60Hz
- Current rating up to 1.5A
- Plugs into standard 2-prong/3-prong 115V outlet
- See page 50 for wall adapter enclosures

**SALE**



Polarity 1 (center negative)

We will change any power plug (see web) on any DC wall transformer listed (100 pc. minimum)

Polarity 2 (center positive)

Part Number	Mfr. Cross Reference No.*	Output Rating		Output Plug		Dimensions (In.) (±10%)			Case Color	DC Cord Length	Weight (lbs.)	Agency Approvals	Pricing		
		Volt. (VDC)	Current	ID x OD (mm)	Plug Type / Polarity	H	W	D					1	10	50
164101EF	DCR505F12	5	500 mA	2.1 mm x 5.5 mm female 2	(regulated)	2.76	2.02	1.59	Black	6'	0.6	UL/CSA	\$8.95	\$8.09	\$7.25
171301EF	JOD48U08	5	1000 mA	2.1 mm x 5.5 mm female 2	(regulated)	3.13	2.93	2.00	Black	6'	1.0	UL/CUL	10.95	9.89	8.89
168604EF	RWP480505	5	1000 mA	2.5 mm x 5.5 mm female 2	(regulated)	3.30	2.20	1.92	Black	6'	1.2	UL/CSA	10.95	9.89	8.89
101266EF	DC605F12	6	500 mA	2.1 mm x 5.5 mm female 2		2.44	1.89	1.61	Black	6'	0.4	UL/CSA	<del>\$4.95</del> 3.95	3.59	3.25
190529EF	AD9123	9	250 mA	2.5 mm x 5.5 mm rt. angle female 2	(reg)	2.47	2.02	1.60	Black	12'	0.5	UL/CSA	5.69	5.15	4.55
133891EF	DC903F1	9	300 mA	2.1 mm x 5.5 mm female 2		2.00	1.50	1.50	Black	6'	0.4	UL/CSA	3.95	3.59	2.85
140636EF	DC904F5	9	400 mA	2.5 mm x 5.5 mm female 2		2.58	2.00	2.00	Black	6'	0.6	UL/CSA	4.19	3.79	3.39
100853EF	DC905F12	9	500 mA	2.1 mm x 5.5 mm female 2		2.50	1.90	1.74	Black	6'	0.6	UL/CSA	4.49	4.05	3.65
100175EF	DC906F5	9	600 mA	2.5 mm x 5.5 mm female 2		2.50	1.90	1.75	Black	6'	0.6	UL/CSA	5.49	4.75	4.25
100888EF	48-09-1000D	9	1000 mA	2.1 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	1.0	UL/CSA	7.95	7.19	6.45
102496EF	DC1205F12	12	500 mA	2.1 mm x 5.5 mm female 2		2.50	1.90	1.57	Black	6'	0.6	UL/CSA	4.95	4.49	3.55
131300EF	SCP41	12	500 mA	2.1 mm x 5.5 mm right angle female 2		2.60	1.90	1.74	Beige	6'	0.6	UL/CSA	4.95	4.49	4.05
102277EF	DC1205F5	12	500 mA	2.5 mm x 5.5 mm female 2		2.50	2.08	1.68	Black	6'	0.6	UL/CSA	4.95	4.49	4.05
100870EF	DC1210F1	12	1000 mA	2.1 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	0.9	UL/CSA	7.95	6.95	6.25
170245EF	DCR1210F12	12	1000 mA	2.1 mm x 5.5 mm female 2	(regulated)	3.20	2.26	1.97	Black	6'	1.2	—	13.95	12.59	11.35
105478EF	DC1210F5	12	1000 mA	2.5 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	1.0	UL/CSA	<del>\$8.95</del> 6.95	6.25	5.59
196779EF	D1212950	12	1200 mA	2.5 mm x 5.5 mm female 2		3.04	2.29	1.85	Black	6'	1.0	UL/CUL	7.79	6.95	6.29
101291EF	DC1215F5	12	1500 mA	2.5 mm x 5.5 mm female 2		3.40	2.70	2.20	Black	6'	1.5	UL	<del>\$10.95</del> 9.95	8.99	8.09
192786EF	MK135100	13.5	1000 mA	2.1 mm x 5.5 mm female 1		2.90	2.27	1.95	Black	6'	1.0	UL	8.95	8.09	6.45
190001EF	DC1505F1	15	500 mA	2.1 mm x 5.5 mm female 2		2.30	2.35	1.90	Black	6'	0.8	UL/CSA	6.95	6.29	5.65
155803EF	DC1506F11	15	600 mA	2.1 mm x 5.5 mm female 1		2.90	2.33	1.90	Black	6'	1.0	UL/CSA	8.95	8.09	7.25
191652EF	DC1510F12	15	1000 mA	2.1 mm x 5.5 mm female 2		3.26	2.20	1.90	Black	6'	1.0	UL/CSA	9.59	8.65	7.79
162317EF	DC1605F1	16	500 mA	2.1 mm x 5.5 mm female 2		2.23	2.35	1.90	Black	6'	0.8	UL/CSA	7.95	6.95	6.25
168487EF	KWM020188	18	1000 mA	2.1 mm x 5.5 mm female 2	(regulated)	2.91	1.94	1.62	Black	6'	0.4	UL/CUL	17.95	16.19	14.55
102285EF	DC2404F1	24	400 mA	2.1 mm x 5.5 mm female 2		3.00	2.30	2.00	Black	6'	0.9	UL/CUL	7.95	7.19	6.45

\* Manufacturer may vary

## Component Grab Bags

- Use our 20-drawer cabinet with labels to store your components, P/N 81701EF, pg 50
- Opened grab bags are not returnable

Cabinet – 81701EF

### Capacitors

135394EF



Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135394EF	GB102LB*	1.5 lb. assorted (300 pcs) electrolytic caps. radial, axial, snap (photo above)	1.5 ...	\$12.95	\$11.49
17945EF	GB103	100 assorted tantalum capacitors (dipped epoxy and solid tubular)	0.1 .....	9.95	8.95

### Integrated Circuits

135280EF



Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135280EF	GB108LB*	1 lb. (400 pcs) asst. 7400, 74LS00 series (74, 74C, 74F, 74S, 74ALS, 74HC, 74HCT)	1.0 ...	\$16.95	\$14.95
145242EF	GB109LB*	2 lb. (300 pcs) asst. linear series (LM300, 500, 700, 7800, 7900 reg.)	2.0 .....	16.95	14.95

### LEDs

18041EF



Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
18041EF	GB110	100 assorted sizes & colored LEDs (T1/T1½ round and rectangular)	0.1 .....	\$6.95	\$6.29
18323EF	GB186	500 asst. sizes #18041 LEDs	0.3 .....	19.95	17.95
135271EF	GB110LB*	1 lb. (1900 pcs) asst. #18041 LEDs	1.0 .....	44.95	40.95

### 1/4W Resistors



Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135351EF	GB116LB*	1 lb. (2000 pcs) asst. 1/4W resistors	1.0 ...	\$14.95	\$13.49

\* LB grab bag quantities are approximate

## Hardware Assortment

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10	25
171635EF	GB149LB*	3 lbs. (1400 pcs) assorted types of screws	3.0 .....	\$12.95	\$11.49	\$9.95

## Schwab's School Selection

A selection of Jameco's nine most popular Grab Bags, all individually bagged. North Dakota Engineer, Loren Schwab, recommended this selection of products as a standard item. He also recommends a 20-drawer component cabinet with labels (81701EF photo above) for storage.

**Includes:** Ceramic and electrolytic capacitors, diodes, transistors, potentiometers, switches, LEDs, 1/4W resistors, spacers and standoffs.

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
163213EF	GB197	Schwab's School Selection	3.3 .....	\$39.95	\$34.95
81701EF	CAB20	20-drawer component cabinet	4.7 .....	15.95	13.95

## Surprise Component Grab Bag

Axial and radial electrolytics, monolithic, dipped silver mica and mylar capacitors, connectors, sockets, thermistors, LEDs, resistor networks, diodes, ICs, standoffs, transistors, oscillator/resonators, inductors, crystals, resistors, pots and switches (1075 pcs).

Part No.	Cross Ref. No.	Description	1	10	25
135263FF	GB191LB*	3 lbs. electronic components	\$17.95	\$15.95	\$13.95

\* LB grab bag quantities are approximate

**Kits include the Most Popular Components and a Cabinet with extra drawers for your Customized Expansion**



81875EF (Capacitor Kit)

Each Kit includes a 20-Drawer Component Cabinet (81701EF), 20 clear plastic drawers (85454EF), 20 clear dividers (85446EF), 30 adhesive labels for drawers to identify parts in kit, and all the Electronic Components listed in each kit.

20-drawer  
component  
cabinet with  
every kit!

- Cabinet size: 6.0"L x 15.0"W x 7.9"H
- Cabinet: ABS-Black
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Weight: 4.6 to 6.4 lbs.
- Cabinet is wall-mountable or free standing

See website for refill kits [www.Jameco.com](http://www.Jameco.com)

Need a refill?  
Just call  
1-800-455-6119



85059EF (Switch Kit)

## 1/2-Watt Single Turn Cermet Pot Kit

SAVE \$14

Includes 100 pcs. (10 values) 1/2-watt Linear Taper Potentiometer

10 each	10 each	10 each	10 each	10 each
63P500Ω	63P5kΩ	63P500kΩ	63P1kΩ	63P50kΩ
63P2kΩ	63P20kΩ	63P1MΩ	63P10kΩ	63P100kΩ
Part No.	Description	Wt. (lbs.)	1	10
85032EF	100 pcs. single turn Pot kit	4.9	\$65.95	\$58.95

## 3/4-Watt 15 Turn Cermet Pot Kit

SAVE \$27

Includes 100 pcs. (10 values) 3/4-watt Linear Taper Potentiometer

10 each	10 each	10 each	10 each	10 each
43P500Ω	43P5kΩ	43P500kΩ	43P1kΩ	43P50kΩ
43P2kΩ	43P20kΩ	43P1MΩ	43P10kΩ	43P100kΩ
Part No.	Description	Wt. (lbs.)	1	10
85041EF	100 pcs. 15 turn Pot kit	4.9	\$87.95	\$78.95

## Switch Assortment Kit

SAVE \$52

Includes 150 pcs. (15 types) PB, Slide, Dip & Toggle Switches

10 each	10 each	10 each	10 each	10 each
206-4	JMT121	JMT223	MPC221	MS103
206-8	JMT123	MPC121	MPC223	SDTX620K
JMT113	JMT221	MPC123	MS102	SW153
Part No.	Description	Wt. (lbs.)	1	10
85059EF	150 pcs. Switch kit	5.0	\$98.95	\$88.95

## Hardware and Spacer Assortment Kit

SAVE \$21

Includes 2300 pcs. (23 types) Spacers, Nuts, Flat, Tooth & Lock Washers and Slotted PH Screws

100 each	100 each	100 each	100 each	100 each	100 each
Spacers	Hex nuts	Flat,	Int. tooth,	Split lock	PH machine screws
—	2-56	—	—	#2	2-56 x 1/4, —
4-40	4-40	#4	#4	#4	4-40 x 1/4, 1/2
6-32	6-32	#6	#6	#6	6-32 x 1/4, 1/2
8-32	8-32	#8	#8	#8	8-32 x 1/2, —
Part No.	Description			Wt. (lbs.)	1            10
108433EF	2300 pcs. Hardware kit			7.5 .....	\$59.95       \$53.95

## Ceramic Disc Capacitor Kit

SAVE \$19

Includes 520 pcs. (10 values) 50v ±20% Ceramic Disc Capacitors

20 each	20 each	20 each	100 each	100 each
10pF	47pF	470pF	.022μF	.01μF
22pF	100pF	.001μF	.047μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
81859EF	520 pcs. Ceramic Capacitor kit	5.0	\$32.95	\$29.95

## Monolithic Ceramic Capacitor Kit

SAVE \$5

Includes 280 pcs. (10 types) 50v ±20% Monolithic Ceramic Capacitors

10 each	10 each	10 each	10 each	100 each
22pF	.001μF	.047μF	.47μF	.01μF
100pF	.0022μF	.22μF	1μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
171475EF	280 pcs. Monolithic Cap kit	5.0	\$34.99	\$31.49

## Radial Electrolytic Capacitor Kit

SAVE \$9

Includes 240 pcs. (15 values) ±20% Radial Electrolytic Capacitors

10 each	10 each	20 each	20 each	20 each
100μF @ 50v	1000μF @ 16v	1μF @ 50v	3.3μF @ 50v	22μF @ 50v
220μF @ 25v	2200μF @ 25v	1μF @ 100v	4.7μF @ 50v	47μF @ 50v
470μF @ 25v	3300μF @ 25v	2.2μF @ 50v	10μF @ 50v	100μF @ 25v
Part No.	Description	Wt. (lbs.)	1	10
81867EF	240 pcs. Radial Cap. kit	5.3	\$32.95	\$29.95

## Axial Electrolytic Capacitor Kit

SAVE \$13

Includes 140 pcs. (10 values) ±20% Axial Electrolytic Capacitors

10 each	10 each	10 each	20 each	20 each
47μF @ 50v	220μF @ 50v	1000μF @ 25v	1μF @ 50v	10μF @ 50v
100μF @ 50v	470μF @ 50v	2200μF @ 16v	4.7μF @ 50v	2.2μF @ 50v
Part No.	Description	Wt. (lbs.)	1	10
81875EF	140 pcs. Axial Capacitor kit	5.3	\$39.99	\$35.99

## Mylar Capacitor Kit

SAVE \$9

Includes 280 pcs. (10 values) 100v ±10% Mylar Capacitors

10 each	10 each	10 each	10 each	100 each
.001μF	.022μF	.047μF	.47μF	.01μF
.0047μF	.033μF	.22μF	1μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
81883EF	280 pcs. Mylar Capacitor kit	5.1	\$39.99	\$35.99

## Dipped Tantalum Capacitor Kit

SAVE \$50

Includes 150 pcs. (15 values) ±20% Dipped Tantalum Capacitors

10 each	10 each	10 each	10 each	10 each
.1μF @ 35v	1μF @ 25v	3.3μF @ 35v	10μF @ 16v	22μF @ 16v
.22μF @ 35v	1μF @ 35v	4.7μF @ 35v	10μF @ 35v	33μF @ 25v
.47μF @ 35v	2.2μF @ 16v	6.8μF @ 35v	15μF @ 25v	47μF @ 25v
Part No.	Description	Wt. (lbs.)	1	10
81841EF	150 pcs. Tantalum Capacitor kit	4.8	\$74.95	\$67.95

## Transistor Assortment Kit

SAVE \$12

Includes 560 pcs. (20 types) NPN, PNP (High/Medium/Low Power) Transistors

10 each	10 each	10 each	10 each	100 each
2N2222A	2N4401	MJE3055T	TIP31A	2N3904
2N2907A	2N4403	MPF102	TIP32A	2N3906
2N3053	2N5951	MPSA06	TIP102	PN2222
2N3055	2N7000	MPSA13	TIP120	PN2907
Part No.	Description	Wt. (lbs.)	1	10
82595EF	560 pcs. Transistor kit	5.1	\$87.95	\$78.95

## 7400 Series IC Kit

SAVE \$69

Includes 350 pcs. (30 types) 7400 (TTL) Integrated Circuits

10 each	10 each	10 each	10 each	10 each	20 each
7402	7416	7438	74107	74157	7400
7405	7417	7447	74123	74160	7404
7408	7420	7470	74132	74174	7406
7410	7430	7485	74151	74175	7407
7414	7432	7495	74153	74279	7474
Part No.	Description	Wt. (lbs.)			110
84953EF	350 pcs. 7400 IC kit	6.2	\$139.95	\$125.95	



**Kits include the Most Popular Components and a Cabinet with extra drawers for your Customized Expansion**



81875EF (Capacitor Kit)

Each Kit includes a 20-Drawer Component Cabinet (81701EF), 20 clear plastic drawers (85454EF), 20 clear dividers (85446EF), 30 adhesive labels for drawers to identify parts in kit, and all the Electronic Components listed in each kit.

20-drawer component cabinet with every kit!

- Cabinet size: 6.0"L x 15.0"W x 7.9"H
- Cabinet: ABS-Black
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Weight: 4.6 to 6.4 lbs.
- Cabinet is wall-mountable or free standing

See website for refill kits [www.Jameco.com](http://www.Jameco.com)

Need a refill? Just call 1-800-455-6119



108433EF (Hardware Kit)

## 74LS Series IC Kit

Includes 420 pcs. (35 types) 74LS (TTL) Integrated Circuits

SAVE \$45

10 each	10 each	10 each	10 each	20 each
74LS05	74LS73	74LS125	74LS193	74LS00
74LS10	74LS75	74LS139	74LS240	74LS02
74LS11	74LS85	74LS151	74LS244	74LS04
74LS14	74LS86	74LS155	74LS245	74LS08
74LS20	74LS90	74LS157	74LS273	74LS32
74LS30	74LS93	74LS174	74LS373	74LS74
74LS47	74LS123	74LS175	74LS374	74LS138
Part No.	Description	Wt. (lbs.)	1	10
84961EF	420 pcs. 74LS IC kit	6.7	\$119.99	\$107.99

## 4000 Series CMOS IC Kit

Includes 300 pcs. (25 types) CD4000 Series Integrated Circuits

SAVE \$30

10 each	10 each	10 each	10 each	20 each
CD4015	CD4024	CD4051	CD4093	CD4001
CD4016	CD4027	CD4069	CD4511	CD4011
CD4017	CD4040	CD4070	CD4538	CD4013
CD4020	CD4046	CD4071	CD4543	CD4049
CD4023	CD4050	CD4081	CD4584	CD4066
Part No.	Description	Wt. (lbs.)	1	10
84970EF	300 pcs. 4000 series CMOS IC kit	6.1	\$79.95	\$71.95

## Linear Series IC Kit

Includes 480 pcs. (40 types) Linear Series Integrated Circuits

SAVE \$53

10 each	10 each	10 each	10 each	20 each
TL072CP	LM337T	LF412CN	ULN2803A	LM317T
TL074CN	LF353N	LMC555CN	NE5532	LM324N
TL082CP	LF356N	LM556N	7808T	LM339N
TL084CN	LM358N	LM723CN	78L12	LM741CN
MAX232CPE	LM386N-1	LM1458N	7815T	LM555CN
LM301N	LM386N-3	LM1488N	7905T	7805T
LM308N	LM393N	LM1489N	7912T	78L05
LM311N	LF411CN	ULN2003A	7915T	7812T
Part No.	Description	Wt. (lbs.)	1	10
84988EF	480 pcs. Linear IC kit	6.0	\$189.95	\$169.95

Grab Bag Refill Kits @ [www.Jameco.com](http://www.Jameco.com)

## LEDs & LED Mounting Hardware Kit

See pages 26 & 27 for photos and specs.

SAVE \$34

Includes 560 pcs. (20 types) LEDs and mounting hardware

10 each	10 each	10 each	10 each	100 each
LVG2043	HPQLMPD141	LSG2040	LG3330	LMH100
LH2043	CLF280CTP	LY2040	LY3330	LMH200
LT0333-41	LTL-425B	LA93B/G-1	LFH3360	LR2040
LG3333	LHG3392	LA93B/H-1	LEG3362	LR3330
Part No.	Description	Wt. (lbs.)	1	10
84996EF	560 pcs. LED & Hardware kit	5.0	\$59.95	\$49.95

## 1/8-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/8-watt 5% Resistors

SALE

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.5kΩ	3.3kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	2Ω	5.1kΩ	22kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2.2kΩ	5.6kΩ	27kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.7kΩ	6.8kΩ	33kΩ	10MΩ		
Part No.	Description	Wt. (lbs.)			1	10	
108329EF	540 pcs. 1/8-watt Resistor kit	4.9 ..... Was <del>\$27.95</del>			\$24.95	\$22.49	

## 1/4-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/4-watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.2kΩ	2.7kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	1.5kΩ	3.3kΩ	20kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2kΩ	5.1kΩ	22kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.2kΩ	5.6kΩ	33kΩ	10MΩ		
Part No.	Description				Wt. (lbs.)	1	10
81832EF	540 pcs. 1/4-watt Resistor kit				4.9 .....	\$27.95	\$24.95

## 1/2-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/2-watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.5kΩ	3.3kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	2kΩ	5.1kΩ	22kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2.2kΩ	5.6kΩ	27kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.7kΩ	6.8kΩ	33kΩ	10MΩ		
Part No.	Description				Wt. (lbs.)	1	10
107879EF	540 pcs. 1/2-watt Resistor kit				5.1 .....	\$29.95	\$26.95

## 5mm x 20mm Miniature Fuses

Fast Acting (250V) GMA Fuses

- Recommended for new designs
- Prepackaged: order in increments of 10, 100 or 1000



Part No.	Amps	Mfr.	10	100	500	1000
103886EF	250mA	Various	\$.20	\$.15	\$.11	\$.10
102040EF	500mA	Various	... .19	... .15	... .10	... .09
103907EF	1 amp	Various	... .20	... .15	... .11	... .10
103915EF	2 amp	Various	... .20	... .15	... .11	... .10
103923EF	3 amp	Various	... .20	... .15	... .11	... .10
103931EF	5 amp	Various	... .20	... .15	... .11	... .10

## 5mm x 20mm Miniature Low-Profile Fuse Holder

- Accepts 5 x 20mm fuses
- 10A @ 250VAC
- Size: 1.4"L x 0.6"Dia.
- D style mounting hole: 1 ea. 0.5"Dia x .46" flat



Part No.	Description	1	10	100
102832EF	Fuse holder UL/CSA	\$1.95	\$1.79	\$1.59

54 More Fuses @ [www.Jameco.com](http://www.Jameco.com)

## 140-Watt DC-AC Inverter



- Input voltage: 10-15VDC
- Output voltage: 110VAC @ 60Hz
- Battery low shutdown • Peak power surge capable
- Overload & high grade thermal protection
- Size: 5.5"L x 2.6"W x 1.6"H • Weight: 1.3 lbs.

SALE

Part No.	Description	1	10	25
188293EF	Cigarette plug	\$49.95	\$42.49	\$31.89

## Miniature Toggle Switches

- Mounting hole diameter: 1/4"
- Includes: Mounting hardware

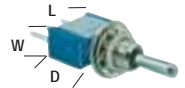
Figure 1



Figure 2



Figure 3



Part No.	Mfr. Cross Ref. No.	Fig.	Pins	Type ( ) Momentary	L" x W" x D"	Dimensions			Lead Spacing Contact Rating	Lead Type	Lever Type	Pricing					OEM
						A"	B"	C"				1	10	100	250	1000	
76523EF	JMT113	1	2	SPST on-off	.52 x .32 x .38	—	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	\$1.15	\$1.03	\$ .93	\$ .75	\$ .65	
21936EF	JMT123	3	3	SPDT on-on	.52 x .32 x .38	—	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.15	1.03	.93	.75	.65	
22832EF	LFH123	3	3	SPDT on-on	.52 x .28 x .36	—	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Flat	1.15	1.05	.95	.85	.75	
21979EF	JMT223	2	6	DPDT on-on	.52 x .52 x .38	.20	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.49	1.29	1.15	.99	.59	
75900EF	SWM133	2	6	DPDT on-on	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.49	1.35	1.25	.99	.85	
21952EF	JMT221	2	6	DPDT on-off-on	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.29	1.16	1.04	.89	.75	
75951EF	SWM130	2	6	DPDT (on)-off-(on)	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.49	1.35	1.25	.99	.89	
26358EF	MPC221	2	6	DPDT on-off-on	.52 x .52 x .38	.20	.185	—	5A @ 125VAC & 2A @ 250VAC	PC	Round	1.19	1.09	.91	.73	.55	

## Subminiature Toggle Switches

- Mounting hole diameter: 7/32"
- Pre-tinned leads
- Metal construction

Includes: Mounting hardware

Figure 1

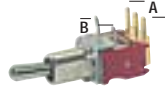
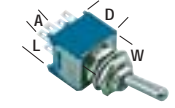


Figure 2



Figure 3



Part No.	Mfr. Cross Ref. No.	Fig.	Pins	Type	L" x W" x D"	Lead Spacing		Contact Rating	Lead Type	Lever Type	Pricing					OEM
						A"	B"				1	10	100	250	1000	
106067EF	SWP124	1	3	SPDT on-on	.25 x .33 x .40	.20	.10	30mA @ 5VDC	PC right angle	Round	\$1.99	\$1.83	\$1.59	\$1.44	\$1.32	
72160EF	SW1501	2	2	SPST on-off	.33 x .21 x .33	.10	—	1.5A @ 250VAC	Solder lugs	Round	1.29	1.24	1.14	.98	.79	
75969EF	SWM136	2	3	SPDT on-on	.33 x .21 x .33	.10	—	3A @ 125VAC	Solder lugs	Round	1.55	1.44	1.21	.86	.63	
72557EF	SW1502	2	3	SPDT on-off-on	.33 x .21 x .33	.10	—	1.5A @ 250VAC	Solder lugs	Round	1.35	1.25	1.05	.85	.60	
138907EF	SW1503	2	6	DPDT on-off-on	.36 x .37 x .33	.10	—	3A @ 120VAC	Solder lugs	Round	1.29	1.05	.85	.65	.55	
75977EF	SWM137	3	6	DPDT on-on	.33 x .37 x .33	.17	.10	1.5A @ 250VAC	Solder lugs	Round	1.29	1.05	.85	.65	.55	

## Pushbutton Switches

- Contact rating: 3A @ 125VAC
- 2-pins
- Lead type: solder terminal



Figure 1

### Miniature Soft Touch Switch

Part No.	Product No.	Fig.	Type ( ) Momentary	Dimensions	Lead Spacing	Thread Diameter	Button Color	Pricing			
								1	10	100	1000
164486EF	DS463R	1	SPST off-(on)	1.2"L x .59"Dia.	.175"	.387"	Red Was <del>\$2.49</del>	\$1.64	\$1.58	\$1.47	\$1.45

### Standard Touch Switch

Part No.	Product No.	Fig.	Type ( ) Momentary	Dimensions	Lead Spacing	Thread Diameter	Button Color	Pricing			
								1	10	100	1000
164582EF	DS016B	2	SPST off-(on)	.88"L x .46"Dia.	.220"	.354"	Black	\$1.49	\$1.39	\$1.25	\$1.15



Figure 2

## Pushbutton Switches

- Pins: 2
  - Normally open and closed configurations
  - Momentary action pushbutton switches
- Includes: Mounting hardware

Figure 1

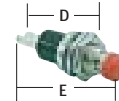
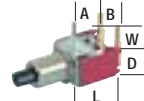


Figure 2



Part No.	Mfr. Cross Ref. No.	Fig.	Mounting Hole Dia.	Type ( ) Momentary	Dimensions (L" x W" x D")	Lead Spacing		Contact Rating	Terminal Type	Button Color	Pricing					OEM
						A"	B"				1	10	100	250	1000	
26622EF	MS102	1	1/4"	SPST off-(on)	.65 (D) x 1.10 (E)	—	.14	3A @ 125VAC	Solder lugs	Red	\$ .55	\$ .50	\$ .45	\$ .35	\$ .29	
26649EF	MS103	1	1/4"	SPST on-(off)	.65 (D) x 1.10 (E)	—	.17	3A @ 125VAC	Solder lugs	Black	.55	.50	.45	.35	.29	
71642EF	SWB210	2	7/32"	SPST off-(on)	.33 x .36 x .20	.20	.20	1A @ 120VAC	PC right angle	Black	2.19	1.99	1.78	1.60	1.39	

## Tactile Switches

- Bounce time: 10 msec.
- SPST momentary ON
- Contact resistance: 100mΩ

Part No.	Mfr. Cross Ref. No.*	Fig.	Pins	Dimensions (in.)				Lead Spacing		Contact Rating	Lead Type	Button Color	Pricing			
				L	W	D	C	A"	B"				1	10	100	250
122972EF	DTS1212	1	4	.47	.47	.18	—	.20	.50	20mA @ 15VDC	PC	Black	\$ .26	\$ .23	\$ .19	\$ .17
155379EF	KRS-1273B	2	4	.47	.47	.14	.14	.17	.53	50mA @ 12VDC	PC	Brown	.39	.35	.31	.26

\*Manufacturer cross reference number and manufacturer may vary

Figure 1

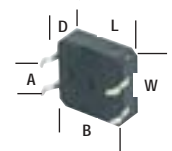


Figure 2

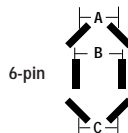


## Full Size Toggle Switch

- Contact rating: 10A @ 125 VAC & 6A @ 250VAC
- Panel mount
- Full-size round lever
- Medium duty
- Lead type: screw lugs
- Mounting hole diameter: 1/2"
- Keyed plate indicates switch position
- Type: DPDT on-on

Includes: Mounting hardware and on/off plate

Part No.	Mfr. Cross Ref. No.	Dimensions	Lead Spacing (A/B/C)	1	10	100	250
158078EF	JKN3CC	1.9"L x .76"W x .73"D	.44" x .59" x .44"	\$1.75	\$1.59	\$1.29	\$ .99



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See our website for our selection of Rotary and Plunger Switches.





## Excell Rotary DIP Switches

- Gold plated contacts to ensure reliable, low resistance connection
- Fully sealed construction
- Terminals: PC pin leads
- Life: 10,000 cycles min.
- Material: 94V-0 grade, UL approved fire retardant plastic
- Ma. switching load rating: 25mA @ 24VDC
- Op force: 500g-cm ma.



139635EF



139651EF

Part No.	Product No.	Position	Adjust	Code Type	W" x D" x H"	1	10	50	100
139635EF	ERD110RS(DRD10)	10	top	BCD	0.39 x 0.39 x 0.20	\$2.59	\$2.33	\$2.07	\$1.86
139651EF	ERD116RS	16	top	Hex	0.39 x 0.20 x 0.39	<del>\$2.95</del> 2.75	2.49	2.22	1.99

## Magnetic Reed Switches

- NO (normally open) • Contact form: SPST
- Rating: 500mA @ 100VDC
- 171871EF: • Rating: 1A @ 250VAC; 1A @ 50VDC



164081EF

Part No.	Product No.	Size (length includes leads)	1	10	100	1000
171871EF	MKA141011015	1.73"L x 0.1"Dia.	\$ .79	\$ .64	\$ .46	\$ .41
164081EF	MRS1	2.35"L x 0.2"Dia.	Was <del>\$0.99</del> .79	.63	.43	.39

## SPST Round Keylock Switch

- Used in computer & other security systems
- Key removable from 2 positions
- Voltage: 125VAC • Current: 3A
- Two keys • Style SPST
- Terminal: barrel
- Length: .55"
- Number flat: 2
- Diameter: .21"
- Mounting hole: 0.5"



Includes: Mounting nut

Part No.	Mfr. Cross Ref. No.	1	10	50	100
106649EF	KS4B	\$3.59	\$3.29	\$2.89	\$2.49

## DIP Switches



109057EF



38818EF



38842EF



38797EF

- Switch contacts: SPST • Switches are numbered
- 50VDC @ 100mA • Molded construction
- Standard switches have raised lever
- LP switches are flush to casing • Pre-tinned leads

Compatible Socket Chart, see website for Sockets

Switch	Socket	Switch	Socket	Switch	Socket
109057EF	112192EF	38826EF	37161EF	38797EF	38607EF
38818EF	51570EF	38842EF	37372EF		

Part No.	Mfr. Cross Ref. No.*	Pos.	1	10	100	1000
109057EF	206-2	2	<del>\$0.85</del> \$.75	\$.68	\$.61	\$.55
38818EF	206-4	4	.65	.55	.49	.45
38826EF	206-6	6	.99	.89	.79	.72
38842EF	206-8	8	.89	.80	.72	.64
38797EF	206-10	10	.95	.86	.68	.51

\* Manufacturer Cross Reference number and manufacturer may vary

## Rotary Switches

- Panel mount
- Make before break
- Solder lugs
- Layers: 1
- Contact rating: 30VDC @ 0.3A
- Insulation resistance: 10MΩ min.
- Contact resistance: 30mΩ
- Material: solid brass bushings, slotted aluminum shafts, plated frame, phenolic contact wafer (except for P/N 101565EF – plastic casing)
- Mounting hole diameter: 3/8"
- Lug size: 0.07" • Shaft size: 0.46" x 0.25"
- 101565 : Shaft size: 1.16" x 0.25"



101573EF

**SALE**

Includes: Washer and nut

Part No.	Mfr. Cross Ref. No.*	Poles	Position	1	10	100
101531EF	RS0261	1	12	\$1.29	\$1.15	\$1.04
101573EF	RS022	2	6	1.35	1.15	.90
101565EF	RS023	3	4	1.95	1.59	1.25
101557EF	RS024	4	3	1.09	.93	.69

\* Manufacturer Cross Reference number and manufacturer may vary

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## Slotted Optical Switch

- Type N package
- Input diode: forward voltage (V<sub>F</sub>) – 1.60V (I<sub>F</sub>=10mA); reverse current (I<sub>R</sub>) – 100μA (V<sub>R</sub> = 3.0V)
- Output phototransistor: breakdown voltage (V<sub>BR</sub> CEO) = 30V min.; collector-emitter dark current (I<sub>CEO</sub>) – 100nA (V<sub>CE</sub> = 5V)
- Coupled: saturation voltage (V<sub>SAT</sub>) – 0.40V (I<sub>F</sub> = 10mA; I<sub>C</sub>=100μA) gap unblocked



**SALE**

Part No.	Product No.	1	10	100
189481EF	OPB660N Was <del>\$2.95</del>	\$1.99	\$1.79	\$1.59

## 12-Button Telephone Keypads

- White plastic
- 8-pin .100" header
- Tactile type keypad
- Contact rating: 12VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 cycles per key
- Size: 2.8"L x 2.2"W x 0.6"H



153488EF

Part No.	Description	1	10	100
190561EF	Numeric keypad .....	\$8.75	\$7.45	\$5.59
153488EF	Alpha numeric keypad ..	9.49	8.55	7.69

## 16-Button Numeric Keypad

- 4 x 4 matrix keypad
- 8-position solder pad
- Contact rating: 24VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 life cycles per key
- Size: 3.0"L x 2.8"W x 0.6"H



Part No.	Description	1	10	100
169244EF	Numeric keypad .....	\$7.95	\$6.95	\$6.25

## 16-Button Indoor/Outdoor Keypads

- 9-pin 0.100" headers
- Fully sealed snap-dome contact
- For indoor or outdoor use
- Contact rating: 24VDC @ 10mA resistive
- Life test: 3,000,000 cycles per key
- Compatible with MOS, TTL and DTL (10Ω max.)
- Recommended connector: P/N 103190EF header and 100765EF pin
- Size (housing): 4.7"W x 1.7"H x 0.4"T



152063EF

\* Prepackaged: please order in increments of 10 or 100

Part No.	Description	1	10	100
152063EF	4x4 matrix keypad .....	\$14.95	\$13.49	\$11.95
103190EF	Header housing (10-pin) .....	.42	.39	.36
100765EF	Header pin (10 per pack) ....	*	.11	.09



## Click Action Basic Precision Switches

- 3 terminals: common; normal closed; normal open
- Dielectric strength: 1000VAC 50-60Hz for 1 min.
- Insulation resistance: 100MΩ min. (@ 500VDC)
- Type: NO-NC-common



159599EF

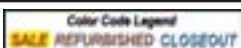


159572EF



159581EF

Part Number	Product Number	Description	Rating	Contact Resistance (initial)	Service Life		Terminals Type	Agency Approval	Pricing		
					Mechanically	Electrically			1	10	100
159599EF	SS0505A	Subminiature	5A @ 125VAC	30milliΩ max.	10 million	200,000	.127" quick discon.	UL	\$3.25	\$2.92	\$2.59
159572EF	VS10N051C	Micro (T90S1D12-12)	10A @ 250VAC	15milliΩ max.	10 million	100,000	.183" quick discon.	UL/CSA	2.89	2.54	2.28
159581EF	VS10N021C2	Micro	10A @ 250VAC	15milliΩ max.	10 million	100,000	.183" quick discon.	UL/CSA	2.45	2.25	1.99



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## Small High-Current PC Mount Relays

An inexpensive means of switching loads up to 30 amps. While these small, low-cost relays are designed primarily for the appliance industry and the heating, air conditioning and ventilation markets, they are also well suited for automotive load management and other applications.

- Meets UL class F insulation standard
- Electrical life expectancy is 100,000 operations at rated loads

104926EF: Open frame relay

Part Number	Mfr. Cross Ref. No.	Potter & Brumfield Cross Reference	Fig.	Contact Form	Coil Voltage	Coil (Ohms)	Contact Voltage	Contact Current	Pins	L x W x H (in.)	Pricing			
174449EF	LU-5	T81H5D215	A1	SPDT	5VDC	125	120VAC/24VDC	1A/2A	6	.60 x .40 x .45	\$1.79	\$1.66	\$1.55	\$1.49
104926EF	733SPDT12VDC*	T90N5D12-12	B2	SPDT	12VDC	155	240VAC/28VDC	20A/10A	6	1.2 x .90 x .63	1.85	1.69	1.49	1.27
172937EF	JS1-12V	T72M5D121-12	C3	SPDT	12VDC	400	125VAC/24VDC	10A/5A	5	.85 x .62 x .63	1.09	.99	.89	.75

\* Manufacturer and Manufacturer Cross Ref. number may vary



A



B



C

Fig. 1

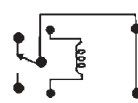


Fig. 2

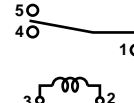
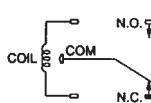


Fig. 3



## DIP Relays

- Logic control levels
- Moisture resistant
- Compatible with IC sockets
- Long life with reliable operation
- Compact design/construction
- Excellent for PCB applications



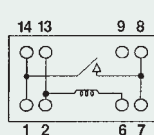
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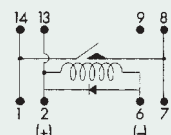
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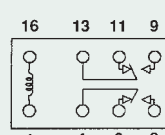
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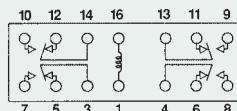
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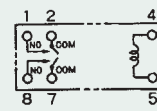
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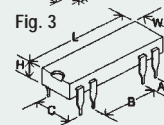
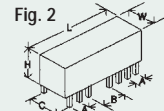
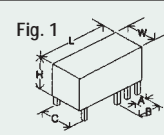
Schematic 3



Schematic 4



Schematic 5



Part Number	Mfr. Cross Ref. No.	Manufacturer	Contact Schem.	Contact Form	Coil Voltage	Coil Ohms	Contact Voltage	Contact Current	Pins	Jameco Socket	Fig.	Size L x W x H (in.)	Leads A x B x C (in.)	Pricing			
106462EF	201A05	Excel Cell Elect.	1	SPST-NO	5VDC	500	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	\$2.15	\$1.81	\$1.52	\$1.25
138430EF	2D1A05	Excel Cell Elect.	2	SPST-NO	5VDC	500	100VDC	0.5A	8	37161	3	.77 x .30 x .22	.10 x .40 x .30	2.29	1.95	1.65	1.34
106471EF	201A12	Excel Cell Elect.	1	SPST-NO	12VDC	1000	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	2.29	1.95	1.65	1.39
192760EF	5MBU-5	Fujitsu	5	DPST-NO	5VDC	35	240VAC/24VDC	5A	8	—	1	1.13 x .50 x .98	.17 x .76 x .28	1.95	1.75	1.49	1.25
173913EF	AZ831-2C-5DSE	American Zettler	3	DPDT	5VDC	125	125VAC/100VDC	.5A/1.25A	8	37401	1	.79 x .38 x .44	.18 x .28 x .29	2.35	2.15	1.69	1.25
139977EF	RSB5S	Shin Mei	3	DPDT	5VDC	125	120VAC/30VDC	1A/2A	8	37372	1	.79 x .39 x .37	.20 x .40 x .30	2.49	2.25	1.95	1.75
99338EF	LM12C00	Clare	3	DPDT	6VDC	71	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .43	.20 x .40 x .30	2.49	2.25	1.79	1.35
99901EF	LX200D00	Clare	3	DPDT	12VDC	720	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .30	.20 x .40 x .30	6.95	6.25	5.63	4.49
136549EF	DS4E-M-DC5V*	Aromat	4	4PDT	5VDC	62.5	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	5.95	5.49	4.95	4.05
176313EF	DS4E-M-DC12V	Aromat	4	4PDT	12VDC	360	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	6.95	6.29	5.29	4.39

\* Manufacturer and Manufacturer Cross Ref. number may vary

## Potter &amp; Brumfield Type Plastic Enclosed Construction Relay

- Dielectric strength: 500VDC (between contact and coil)
- Operating temperature: -35°C to +85°C
- Normally open (NO), normally closed (NC)
- Terminal type: quick connect
- Size: 1.1"L x 1.1"W x 1.0"H

## VF4 Type Relays

Part Number	Mfr. Cross Ref. No.	P&B Cross Reference	Contact Form	Coil Voltage	Coil Ohms	Contact Voltage	Contact Current	Pins	Pricing			
148582EF	LD12F	VF485F11	SPDT	12VDC	78	12VDC	40A	5	\$2.49	\$2.25	\$1.95	\$1.75

## VF4 Type Socket with Coil Diode

- For use with P/N 148582EF (above)
- Contact voltage/current: 12V/20A
- 12 AWG: 2 black and 1 blue wire
- 18 AWG: 1 black and 1 red wire

- 7.5" wire
- Diode coil suppression

Part Number	Mfr. Cross Ref. Number	Description	Pricing			
170624EF	RSD03	Relay socket with coil diode (for P/N 148582EF above)	\$2.35	\$2.15	\$1.69	\$1.25



67 More @ [www.Jameco.com](http://www.Jameco.com)



Our complete selection of Relays and relay Sockets is at Jameco.com.

## General Purpose Relays

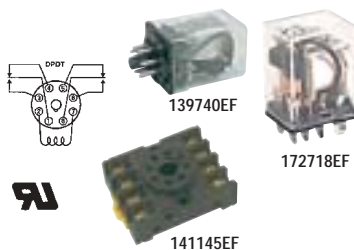
- DPDT • 8-pins

### Pin Type Terminals – Series 78

- Contact voltage: 240VAC

### Pin Type Terminals – Series 250

- Contact rating: 120/240VAC, 28VDC @ 10A
- Ambient temp. operating: -10°C to +50°C
- Size: 1.4"L x 1.4"W x 2.7"H



Part Number	Mfr. Cross Ref. Number	P&B Cross Reference	Coil Voltage	Pricing		
				1	10	50
<b>Series 78</b>						
172718EF	SCL12DPDT	K10-11D15-R	12VDC	\$4.99	\$4.49	\$3.99
<b>Series 250</b>						
139766EF	BTA1-2C-12VDC	R02-11D10-12	12VDC	\$9.49	\$8.55	\$7.69
139740EF	BTA1-2C-120VAC	R02-11A10-120	120VAC	9.95	8.79	7.99

### Series 250 Sockets

Part No.	Voltage	Current	Pins	Size (lbs.)	1	10	50
141145EF	250VAC	20 amps	8	2.0"L x 1.6"W x 0.8"H	\$3.99	\$3.65	\$2.99
141153EF	250VAC	20 amps	11	2.0"L x 1.7"W x 1.2"H	5.19	4.85	4.19

## Rayex General Purpose Relays

### Potter and Brumfield Type LB2 Series

- DPDT • 8-pins
- Contact rating: 240VAC/30VDC @ 12A
- Mechanical life: 10,000,000 operations
- Electrical life: 100,000 operations min. at rated load



Part Number	Product Number	P & B Cross Reference	Coil Voltage	Pricing			
				1	10	50	100
172718EF	SCL12DPDT	K10-11D15-12	12VDC	\$4.99	\$4.49	\$3.99	\$3.59

### Rayex LB2 Socket

- DIN rail snap socket for LB2 relays

Part Number	Product Number	P & B Cross Reference	Pins	Pricing		
				1	10	50
175530EF	PTF08AA	27E895	8	\$5.95	\$5.39	\$4.85



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See our website for a selection of Power PCB Relays.



## DC/AC Solid State Relay

- Pins: 4
- Screw terminal with hardware
- Photo isolation
- Metal mounting base
- Control voltage: 3-32VDC
- Contact style: SPST
- Contact voltage: 240VAC
- Contact current: 25A
- Terminal type: screw terminal • UL approved
- Dimensions: 2.3"L x 0.17"W x 1.1"H

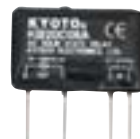


Part No.	Mfr. Cross Ref. No.	1	10	50	100
162368EF	ESR51024-025*	\$21.95	\$19.79	\$17.79	\$16.05

\*Manufacturer may vary

## DC/DC Solid State Relay

- Screw terminal with hardware
- Photo isolation
- Metal mounting base
- Control voltage: 3-32VDC
- Contact style: SPST
- Contact voltage: 60VDC
- Contact current: 4A
- Terminal type: screw lead
- Dimensions: 1.5"L x 0.3"W x 0.9"H



Part No.	Mfr. Cross Ref. No.	1	10	50	100
175222EF	KF0604D*	\$11.95	\$11.25	\$10.25	\$9.22

\*Manufacturer may vary

## SHARP Solid State Relays

### DC to AC

- Effective on-state current: 2A rms
- Input voltage: 1.2V @ 20mA
- Output: 200VAC @ 2.0A
- Operating frequency: 45-65Hz
- Isolation volt: 3000Vrms
- UL/CSA approved

SALE



Part No.	Prod. No.	1	10	50	100
164996EF	S202TA1	\$4.95	\$4.49	\$4.05	\$3.65

## Sensors

### Ultrasonic Sensor Sets

- Use for motion or distance sensing
- Frequency: 40kHz ±1.0kHz
- Aluminum case

#### 136653EF:

##### Transmit/Receive Set

- Capacitance: 2000pF ±30%
- Case size: 0.47"H x 0.62" Dia.
- Transmitter: bandwidth 4.0kHz/112dB, sound pressure level 119dB/40±1.0kHz
- Lead length/spacing: 0.39"
- Receiver: bandwidth 3.5kHz @ -71dB, min. sensitivity 65dB/40±1.0kHz (0dB vs 1V pbar) R=3.9kΩ



136653EF



139491EF

#### 139491EF:

##### Transmit/Receive Set

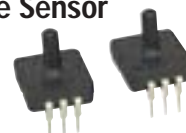
- Capacitance: 2000pF ±20%
- Lead length/spacing: 0.28"
- Transmitter: bandwidth 5.0kHz/100dB, sound pressure level 112dB/40 ±1.0kHz
- Receiver: bandwidth 5.0kHz @ -75dB, min. sensitivity 67dB/40 ±1.0kHz (0dB vs 1V pbar) R=3.9kΩ
- Case size: 0.30"H x 0.43" Dia.

Part No.	Mfr. Cross Ref. No.	1	10	50
136653EF	40TR16F	\$6.95	\$6.29	\$5.65
139491EF	40TR12B	6.95	6.29	5.65



### -1.1 to 2.5 PSI Pressure Sensor

- Measurable pressure range: -1.1 to 2.5 PSI
- Maximum load pressure: twice of rated pressure
- Volt-level output
- Operating voltage: 5V @ <10mA
- Maximum excitation voltage: 8V
- Pressure type: gauge pressure
- Pressure media: non-corrosive gas
- On-chip amplification and temp. compensations
- Pre-calibration of offset voltage and span



SALE

Part No.	Product No.	1	10	100
196103EF	XFPN-025-KPGRNW1	\$24.95	\$21.25	\$15.95



### 0 to 5 PSI Pressure Sensor

- Maximum load pressure: 10 PSI
- Output voltage: 0 – 4.5V
- Operating voltage: 5V @ 10mA
- Pressure type: gauge pressure
- Pressure media: non-corrosive gas
- Accuracy: ±0.125 PSI at 25°C; ±0.250 PSI at -10 to 65°C
- High level output, on-chip signal conditioned, temperature compensated, and calibrated



Part No.	Product No.	1	10	100
173657EF	XFPN-050-KPGT1	\$15.95	\$14.35	\$12.95



### 0 to 1.45 PSI Pressure Sensor

- Typical full scale span @ 35mV: 0-10kPa (0-1.45 PSI)
- Maximum pressure (P<sub>MAX</sub>): 75kPa (10.875 PSI)
- Operating volt. (typical): 3VDC @ 6mA
- Applications: air movement control, level indicators, leak detection, robotics and industrial controls
- 1/8" diameter tubing applicable
- Size: 0.7"Dia. x 0.78"Thick (with nozzle)



Part No.	Product No.	1	10	100
218827EF	MPX10GS	\$8.99	\$8.29	\$7.49

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**.100" IDC Socket Connectors****Double Row Polarized IDC Socket Connectors**

- Mates with 2 rows of .025" Sq. or Dia. posts on patterns of .100" centers (male headers, see below)
- Industry standard IDC socket (plastic)
- Temperature rating: -55°C to +105°C • Current rating: 1A
- Use P/N 73251EF, pg 55: insulation displacement connection crimper for these conn.



Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
32491EF	S10	10	\$.29	\$.25	\$.19	\$.15
32563EF	S26	26	.45	.35	.29	.19
32643EF	S34	34	.49	.39	.35	.25
32678EF	S40	40	.55	.45	.39	.29
32707EF	S50	50	.65	.55	.45	.35

**.197" (5mm) Terminal Blocks**

- Materials: housing: polyimide; solder: tin plated brass
- Lead spacing: .197" • Wire range: 12-24 AWG
- Contact rating: 300V @ 10A • PC mount
- Insulation resistance: 500MΩ or more @ 500V
- Modular housing: end-to-end stackability
- Terminals interlocking with same series



Fig. 1 99397EF

**DT Series DT128 Type (Side Entry) • Block width & height: .40" x .55"**

Part No.	Figure	Terminal	Block Length	1	10	100	1000
99426EF	1	2	0.4"	\$.72	\$.55	\$.44	\$.40
99397EF	1	3	0.6"	.99	.89	.79	.59

**EK500 Series****EK500V Type (Side Entry) • Block width & height: .40" x .55"**

Part No.	Figure	Terminal	Block Length	1	10	100	1000
160784EF	2	2	0.4"	\$.65	\$.55	\$.45	\$.39

**EK500A Type (45° Entry) • Block width & height: .48" x .61"**

Part No.	Figure	Terminal	Block Length	1	10	100	1000
161066EF	3	2	0.4"	\$.75	\$.65	\$.49	\$.39

**.197" (5mm) Vertical Terminal Blocks****Side Entry**

- Rated voltage (UL): 250V
- Rated current: 15A
- Wire size: 14-22 AWG
- Spacing: .197"



- PCB hole diameter: .050"
- Terminal block: copper zinc



189675EF

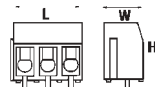
Part No.	Terminal	Size (L"xW"xH")	1	10	100	1000
189675EF	2	.42 x .30 x .37	\$.79	\$.71	\$.64	\$.58
189667EF	3	.61 x .30 x .37	.89	.80	.72	.61

**.200" (5.08mm) Vertical Terminal Blocks****Side Entry**

- Rated voltage (UL): 250V
- Rated current: 15A
- Wire size: 14-22 AWG
- Insulating material: polyimide
- Terminal block: copper zinc

- Spacing: .200"
- PCB hole diameter: .050"
- Wire guard: copper nickel

152346EF



Part No.	Terminal	Size (L"xW"xH")	1	10	100	1000
152346EF	2	.42 x .35 x .49	\$.65	\$.55	\$.45	\$.39
152354EF	3	.62 x .35 x .49	Was \$0.75	.47	.44	.39

**More @ www.Jameco.com**

See our website for our latest selection of power connectors and contacts by Molex.

**European Terminal Blocks**

- Voltage: 600V
- Number of poles: 12
- 1.2mm raised base
- Working temperature: 230°F (110°C)
- Wire protector: stainless steel spring
- Material: Polyamide 66 (nylon 66), UL94V2, natural
- Terminal insert: brass metal alloy, nickel plated • Screws: zinc plated, yellow chromed



215010EF

Part No.	Prod. No.	Amps	AWG	1	10	100
215010EF	PA8H	20A	12-22	\$1.79	\$1.59	\$1.29
215028EF	PA10H	30A	10-22	1.89	1.69	1.39
215036EF	PA12H	35A	10-22	2.59	2.29	1.99

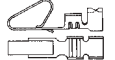
**KULKA® 601 GP Series Double Row Terminal Block**

- Base: general purpose phenolic; 150°C
- Screws: #6-32, binder head, phillips-slot
- Terminals: brass plated
- 1100Vrms; 20A ratings; for 14-16 AWG wires
- UL/CSA/CE approved
- Height: .50"
- Width: 1.12"
- .437" (11 mm) centers
- Open block design

Part Number	Product Number	Poles	Dimensions A" B"	1	10	50
188701EF	601GP12	12	5.69 6.00	\$5.49	\$4.95	\$3.95

**.156" (3.9mm) Center Crimp Pin**

- Use with .156" housings (below) • Material: brass/tin plated
- Prepackaged: order in increments of 10, 100, 1000



Part No.	Mfr. Cross Ref. No.	Pin Wire Gauge	10	100	1000
78318EF	AMP501T	22-26 AWG	\$.11	\$.08	\$.07

**.156" (3.9mm) Center Housing Connectors**

- Common to many power supplies carried by Jameco. Some power supplies (pgs 31-34) may require multiple connectors
- Housing material: nylon 66, UL94V-2
- Use with crimp pins, 78318EF, above



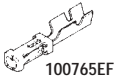
104731EF

\* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Pins	1	10	100	1000
104715EF	LCH4	4	* \$2.22	\$.15	\$.12	
104731EF	LCH6	6	.33	.30	.24	.15



100802EF

**.100" Non-Polarized Single Row Connector Housings & Crimp Pins**

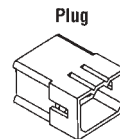
100765EF

- Mates with .025" square post on pattern of .100" centers (male headers, see above)
- Current rating: 1A
- Pin material: brass/tin plated • Plastic
- Pin wire gauge: 22-26 AWG • Temperature rating: -55°C to +105°C
- Prepackaged: order in increments of 10, 100 or 1000

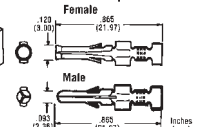
Part No.	Mfr. Cross Ref. No.	Cont.	10	100	1000
100811EF	SCH2	2	\$.23	\$.21	\$.17
157382EF	SCH3	3	.24	.22	.18
100802EF	SCH4	4	Was \$0.29	.25	.23
100765EF	FCH1	Female pin	.11	.09	.06
145357EF	MCH1	Male pin	.15	.135	.12

**.093" Power Connector Kits**

These assortment kits contain mating sets of housings and pins.



142228EF

**Standard Crimp Contacts**

Part No.	Product No.	Current	1	10	50
142181EF	1545	12 Amps	\$4.95	\$4.49	\$3.95
142201EF	1490	9 Amps	5.69	5.15	4.65
142228EF	1261	9 Amps	5.25	4.75	3.95

## .100" and 2mm Shorting Blocks

- Mates to .025" square posts on .100" centers
  - Shorting socket jumper to address or code strip line plugs • Mate with male headers (below)
  - Pin material: phosphor bronze
  - Prepackaged: order in increments of 10, 100 or 1000
- Open: open on top to allow for a test point while Closed: closed – functionally they are the same



Part No.	Description	Color	10	100	1000
22023EF	Top open	Black.....	\$.12	\$.09	\$.06
19140EF	Top closed	Black.....	.12	.09	.06
112441EF	Top closed	Blue.....	.12	.09	.06

## .100" Male Headers (Gold)



- Snap apart to fit your application
- Contact material: phosphor bronze
- Insulation material: glass filled polyester
- Solder to PC boards for instant plug-in access via shorting blocks, above
- .025" square posts on a .100" x .100" matrix • Use w/ crimp connector housing.(pg 44)
- Contact area: gold
- Current rating: 1 amp
- Temp. range: -55°C to +120°C

\*Prepackaged: order in increments of 10, 100 or 1000

## .100" Straight Male Headers

### Single Row

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
108337EF	SMH02	2 .....	*	\$.16	\$.14	\$.13
109575EF	SMH03	3 .....	*	.17	.15	.135
103341EF	SMH30	30 .....	.35	.31	.28	.25
160881EF	SMH40	40 .....	.49	.44	.40	.36

## .100" Straight Male Headers

### Double Row

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
115027EF	923804DS	4 .....	*	\$.10	\$.09	\$.07
115035EF	923806DS	6 .....	*	.18	.16	.14
109516EF	923808DS	8 .....	*	.18	.16	.14
67820EF	923810DS	10 .....	*	.18	.16	.14
109567EF	923816DS	16 .....	.55	.49	.45	.39
117196EF	923880DS	80 .....	.90	.80	.75	.65

## .100" Right Angle Male Headers

### Single Row

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
103270EF	RMH36	36 .....	\$.75	\$.64	\$.58	\$.41

## .100" Right Angle Male Headers

### Double Row

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
139563EF	923880DR	80 .....	\$1.35	\$1.19	\$1.09	\$.99

## .100" Low-Profile Straight Male Shrouded Headers

- Features: UL recognized, CSA certified; .025" square post mates with sockets on .100" x .100" grid
- Contact: phosphor bronze, gold plated
- Material: glass filled polyester, gray, UL94V-0
- Use with IDC socket connectors, pg 44

Part No.	Description	1	10	100	1000
67811EF	10-pin male shrouded header .....	\$.39	\$.35	\$.32	\$.28
68371EF	26-pin male shrouded header .....	.54	.42	.35	.21

## .100" (2.5mm) Female Header Receptacles

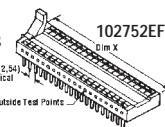
- Gold plated contacts
- 0.1" contact center
- Top entry

Part No.	Contacts	Type	1	10	100	500
163862EF	34	Double row, vertical mount ..	\$1.19	\$1.05	\$.92	\$.79
111704EF	40	Double (Tin), vertical mount ....	1.29	1.15	.99	.89

## ARIES Low Profile ZIF Sockets

A low cost solution for ZIF test socket requirements. It has a height of only .319" (8.10mm), and even with the handle in open position measures just .554" (14.07mm).

- Strong rigid cast metal cam provides uniform action over entire contact area



Part No.	Aries No.	Pins	Dim X	1	10	100
102744EF	28-526	28	1.64" .....	\$5.49	\$4.99	\$4.49
102752EF	40-526	40	2.24" .....	6.95	6.39	5.75

## ARIES Universal ZIF Sockets

- Solder directly to PCB or plug directly into IC socket
- Screw mounting holes for reliable operation
- Accepts .300" to .600" IC centers x .1" spacing

103991EF



Part No.	Aries No.	Pins	1	10	100
103991EF	24-6554-10	24 .....	\$7.49	\$6.79	\$5.99
104002EF	28-6554-10	28 .....	8.45	7.39	7.15
104029EF	40-6554-10	40 .....	Was <del>\$11.86</del> 11.25	9.80	9.45

## PLCC Solder Tail Sockets

- Solder tail allows through-hole board patterns in .100" grid
- Accepts JEDEC type "A" plastic leaded chip (0.05" centers)
- Thru-hole lead length: .125" • Body height: .375"

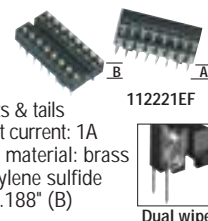


Part No.	Mfr. Cross Ref. No.	Pins	1	10	50	100
71618EF	G1P444	44 .....	\$1.15	\$.99	\$.81	\$.69

## Solder Tail Low Profile Sockets

### Dual Wipe

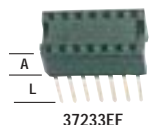
- Material: beryllium copper or phosphor bronze
- Contact resistance: less than 5mΩ • Tin-plated contacts & tails
- Dielectric withstanding voltage: 300Vrms • Contact current: 1A
- Insulation resistance: greater than 1000MΩ • Sleeve material: brass
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Thru-hole lead lgth: .140" (A) • Body height: .188" (B)
- Prepackaged: order in increments of 10, 100 or 1000



Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	10	100	1000
112205EF	8LPD	8	0.3 .....	\$.09	\$.08	\$.07
112213EF	14LPD	14	0.3 .....	.10	.075	.05
112221EF	16LPD	16	0.3 .....	.13	.115	.095
112248EF	20LPD	20	0.3 .....	.17	.14	.11
112299EF	28SLPD	28	0.3 .....	.21	.19	.17
112310EF	40LPD	40	0.6 .....	.26	.23	.19

## Wire Wrap Sockets

- Contact plating/leads: gold (WW) or tin (TWW); Dual Wipe
- Material: beryllium copper or phosphor bronze
- Contact resistance: less than 5mΩ • Contact current: 1A
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Thru-hole lead length: .438" (L) • Sleeve material: brass • Body height: .300" (A)

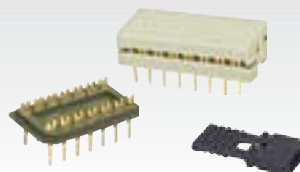


Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	500
37233EF	14WW2	14	0.3 .....	\$1.49	\$1.35	\$1.19	\$1.09
37479EF	16WW2	16	0.3 .....	1.75	1.59	1.43	1.29
38674EF	20WW2	20	0.3 .....	2.25	1.99	1.82	1.65

### Tin (TWW)

Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	500
37217EF	14TWW2	14	0.3 .....	\$1.15	\$1.03	\$.93	\$.84
37436EF	16TWW2	16	0.3 .....	.99	.89	.73	.66

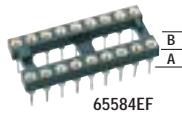
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See our website  
for other  
Shorting Blocks  
and Plugs.

## Machine Tooled Solder Tail Low Profile Sockets

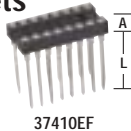
- Contact plating: gold
- Contact current: 3A
- Sleeve material: brass
- Contact resistance: less than 5mΩ
- Material: beryllium copper or phosphor bronze
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Tin-plated leads
- Multiple contact elements
- Body height: .117" (B)
- Thru-hole lead length: .177" (A)



Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	1000
51625EF	8MLP	8	0.3	\$.25	\$.22	\$.19	\$.17
37196EF	14MLP	14	0.3	.42	.38	.33	.30
37401EF	16MLP	16	0.3	.47	.43	.37	.34
65584EF	18MLP	18	0.3	.55	.49	.43	.39
41136EF	40MLP	40	0.6	1.19	1.05	.79	.69

## Machine Tooled Wire Wrap Sockets

- Contact plating: gold
- Thru-hole lead length: .515" (L)
- Contact current: 3A
- Contact resistance: less than 5mΩ
- Material: beryllium copper or phosphor bronze
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Tin-plated leads
- Sleeve material: brass
- Body height: .115" (A)



Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	1000
62050EF	14MSWW3	14	0.3	\$.93	\$.80	\$.67	\$.60
37410EF	16MSWW3	16	0.3	1.09	.93	.78	.69
38631EF	20MSWW3	20	0.3	1.33	1.14	.95	.86
40336EF	28MSWW3	28	0.6	1.69	1.43	1.19	1.07
94502EF	40MSWW3	40	0.6	2.66	2.28	1.90	1.71

## D-Subminiature Connector Hoods

- Use with D-sub solder cup and housing style connectors
- D Series: plastic hood with strain relief (gray)
- MD Series: metal coated plastic hood w/ strain relief
- Includes: Hardware



15085EF Plastic



25620EF Metallized

Part No.	Mfr. Cross Ref. No.	Conn.	1	10	100	500
15721EF	DB9H	9-pin	\$.49	\$.45	\$.39	\$.35
25620EF	MDB9H	9-pin	.59	.49	.39	.35
147740EF	DB9MH	9-pin	1.45	1.29	1.15	.99
15018EF	DA15H	15-pin	.49	.45	.40	.35
25566EF	MDA15H	15-pin	.56	.44	.36	.31
15085EF	DB25H	25-pin	.45	.39	.35	.32
25603EF	MDB25H	25-pin	.59	.49	.42	.35

## 4-40 Mounting Screw Hardware for D-Subminiature Connectors

### 4-40 x .187" Jack Screws

\*Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	1	10	100	1000
172603EF	.315"L jack screw	*.14	*.11	*.09	
102816EF	.435"L jack screw	.49	.46	.41	.37
108986EF	.515"L jack screw	.55	.50	.45	.40



108986EF

### 4-40 Screw Sets

- 16547EF: 4-40 x .187" jack screw (.31"L thread), washer, lock washer and nut set
- 102808EF: 4-40 screw (.30"L) and retainer set
- \* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	10	100	1000
16547EF	Screw/nut set	.31	.25	.17
102808EF	Screw/retainer set	\$.35	\$.30	\$.20



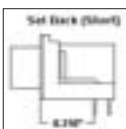
16547EF

102808EF

## D-Subminiature Connectors

- Metal shells are tin-plated for improved EMI/RFI shielding
- Insulation resistance: minimum 1000MΩ at 500VDC
- Dielectric withstanding voltage: 1000V (one minute)
- Current rating: 1A to 5A
- High temperature thermoplastic
- Insulation material: PBT, UL rated 94V-0

### Right Angle PC Mount Connectors



#### 0.318" Set Back

- Short style
- Lead length: .138"
- Lead spacing: .115"
- Shell: metal
- Current rating: 1A



15149EF

**SALE**

Part No.	Mfr. Cross Ref. No.	Cont.	Gen.	Shell	1	10	100	500
104942EF	DB9P318	9	M	\$.55	\$.50	\$.40	\$.30	
104951EF	DB9S318	9	F	.60	.55	.49	.45	
71124EF	DA15P318	15	M	.69	.59	.55	.49	
77956EF	DA15S318	15	F	.79	.69	.65	.45	
15149EF	DB25P318	25	M	.79	.65	.55	.42	
15181EF	DB25S318	25	F	.89	.79	.72	.65	

### Solder-Cup Connectors



15114EF Front



15114EF Back

- Compatible with 24 AWG communications and 22 AWG solid cable, pg 84

Part No.	Contacts	Gen.	Shell	1	10	100	1000
15747EF	9	M	metal	\$.56	\$.44	\$.36	\$.24
15771EF	9	F	metal	.59	.49	.44	.31
15034EF	15	M	metal	.55	.49	.42	.29
15051EF	15	F	metal	.59	.49	.39	.24
15114EF	25	M	metal	.99	.89	.79	.71
15157EF	25	F	metal	.89	.80	.69	.61

### Straight PC Mount Connectors

- Non-removable contacts
- 125 Vrms
- Current rating: 5 amps
- Operating temp.: -65°F to +250°F



15122EF



15780EF

Part No.	Mfr. Cross Ref. No.	Cont.	Gen.	Shell	1	10	100
111691EF	DB9PPCB	9	M	metal	\$.55	\$.45	\$.32
15780EF	DB9SPCB	9	F	metal	.55	.45	.32
176760EF	DA15PPCB	15	M	metal	.49	.39	.27
176751EF	DA15SPCB	15	F	metal	.49	.44	.39
15122EF	DB25PPCB	25	M	metal	.65	.59	.42
15165EF	DB25SPCB	25	F	metal	.74	.55	.31

### Insertion/Extraction Tool

- Exchangeable tips
- For male & female crimp pins

Part No.	Description	1	10	100
19094EF	Insertion/extraction tool	\$.29	\$.24	\$.215

### IDC Ribbon Cable Connectors

- Current rating: 1 amp
- Temp range: -55°C to +120°C
- Insulation material: glass-filled polyester
- Contact material: phosphor bronze
- Terminates with standard D-type connectors



12431EF

Part No.	Mfr. Cross Ref. No.	Cont.	Gen.	Shell	1	10	100
109225EF	MDB9P†	9	M	metal	\$1.35	\$1.25	\$1.09
12503EF	CDB9P	9	M	plastic	2.49	1.79	1.59
109217EF	MDB9S†	9	F	metal	1.49	1.19	1.05
12520EF	CDB9S	9	F	plastic	2.59	2.35	2.09
115983EF	MDB25P	25	M	metal	1.85	1.69	1.45
12335EF	CDB25P	25	M	plastic	1.89	1.69	1.29
115975EF	MDB25S	25	F	metal	1.85	1.65	1.39
12431EF	CDB25S	25	F	plastic	1.95	1.79	1.39

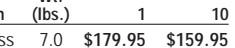
†109225EF/109217EF: require flat cable with .0625" centers

## PANAVISE IDC Bench Press and Cable Cutter

Designed for low to medium volume mass termination of various IDC connectors on flat ribbon cable.



27182EF



27174EF

Part No.	Prod. No.	Description	Wt. (lbs.)	1	10
27174EF	M505	Bench press	7.0	\$179.95	\$159.95

### M505 Accessories

Part No.	Prod. No.	Description	Wt. (lbs.)	1	10
27182EF	M507	Cable cutter	0.9	\$66.95	\$61.95
27203EF	M510	Base plate	0.5	26.49	23.49

## 171-Pc. Solderless Terminal Kit

- Clear, hinged plastic box
- Use crimping tool P/N 72995EF, pg 55

**170 Terminals and Connectors!**



Qty.	Description	Wire Gauge	Blade Size	Qty.	Description	Wire Gauge	Blade Size
10	Male spade	16-22	1/4"	10	Ring term.	14-16	#10
10	Male spade	14-16	1/4"	5	Ring term.	10-12	#10
10	Fem. spade	16-22	1/4"	5	Ring term.	10-12	#14
10	Fem. spade	14-16	1/4"	10	Spade term.	16-22	#6
10	Ring term.	16-22	#6	10	Spade term.	14-16	#8
10	Ring term.	16-22	#8	10	Spade term.	14-16	#10
10	Ring term.	16-14	#10	10	Butt connec.	16-22	-
15	Ring term.	14-16	#6	10	Butt connec.	14-16	-
10	Ring term.	14-16	#8	5	Butt connec.	10-12	-

Part No.	Description	1	10	25
10989EF	Terminal kit	\$8.95	\$7.95	\$7.25



Discover more @ [www.Jameco.com](http://www.Jameco.com)  
Additional D-Subminiature Connectors on our website.



## EPROM Erasers and Accessories

- Erases all EPROMs

### 66042EF:

- Erases 1 chip in 7 minutes
- Conductive foam liner eliminates static build-up
- UV intensity: 6.5mW/cm<sup>2</sup>
- One-year warranty

**Requires:** Four AA batteries (not included), P/N 32627EF (below)

### 15712EF:

- Erases 1 chip in 15 minutes or 8 chips in 21 minutes
- Maintains constant exposure distance of 1"
- Conductive foam liner eliminates static build-up
- Built-in safety lock to prevent UV exposure
- Complete with holding tray for 8 chips
- UV intensity: 6.8mW/cm<sup>2</sup> • One-year warranty

UVP



66042EF



15712EF

Part No.	Description	1	10	25
66042EF	Portable eraser .....	\$64.95	\$58.95	\$52.95
15712EF	8-chip eraser .....	Was <del>\$129.95</del> 109.95	104.95	99.95
34382EF	Lamp for 15712EF .....	34.95	34.95	34.95
13864EF	Foam (12"x24"x0.25") .....	7.95	6.95	6.15
32627EF	'AA' Ni-Cad battery .....	1.95	1.75	1.49

## 512k Two Socket USB Interface E(E)PROM / Flash Programmer

Compact and portable this stand-alone E(E)PROM & flash programmer interfaces with your PC through the USB port.

- Programs EPROMs 27C/LV (64 - 080); EEPROMs 28C(256-040); Flash EPROMs 29C(256 040)/29EE/LE (512-020/ 28F (256-020A)/ 29F (010-040) and more
- 2 sockets for master/slave operation
- IC parameters are adjustable such as programming algorithm, Vpp voltage, and impulse width
- Supports file formats binary and machine code, INTEL HEX, Motorola HEX
- Supports Windows® 95/98/NT/2000/ME/XP
- Size: 6.3"L x 4.3"W x 1.8"H



### FUNCTIONS

Stand Alone Mode:		
- Functions	- Blank check	- Verify
- Type	- Program	
PC-Based Mode:		
- Type	- Read	- Blank
- Check	- Program	- Process
- Verify	- Erase	- Disk
- Help	- Parameter	

**Includes:** USB cable, 12VDC @ 500mA pwr. adapter; and CD-ROM

Part No.	Description	1	5
220636EF	Leaper-3C .....	\$299.95	\$284.95

## Dedicated FLASH programmer with easy graphic PC interface.

*A light, compact portable unit that interfaces with your PC or Laptop through the USB port.*

- Programs 8-bit FLASH serial IC's via USB cable on Windows 9x./2000/XP
- Friendly, easy-to-use graphic operation interface
- High speed: MXIC MX29F040 takes 22 seconds to blank check, program, and verify
- File formats supported: binary and machine code, Intel HEX, Motorola HEX, Tektronix
- Type, read, load, edit, checksum, erase, blank check, program, verify, protect functions
- Supports FLASH EPROM (29C/LC256 to 29C/LC040, 29EE/LE/VE512 to 29EE/LE/VE020, 28F/LF/VF256 to 28F/LF/VF040, 29F010 to 29F040, 29F001 to 29F002, 39SF/VF512 to 39SF/VF040, 49BV/F512 to 49BV/F040, 49BV/F/LV001 to 49BV/F/LV002) EPROM (27C/LV64 to 27C/LV080), EEPROM (28C64 to 28C040)
- Size: 6.2"L x 4.3"W x 1.8"H • Weight: 1.4 lbs.

**Includes:** USB cable, 12V @ 500mA adapter, CD-ROM software and manual

Part No.	Description	Price
225947EF	USB Interface Flash Write/Programmer .....	\$219.95



## MCS-51 programmer with graphical interface for tight budgets.

- Programs 8-bit MCS-51 serial IC's via USB cable on Windows 9x/2000/XP
- Friendly, easy-to-use graphic interface
- High-speed, high performance programming: ATMEL AT89S52 takes 4 seconds to erase, blank check, program, and verify
- Type, read, load, edit, checksum, erase, blank check, program, verify, protect functions
- Supports file formats binary and machine code, Intel HEX, Motorola HEX, Tektronix
- Supports ATMEL; Hyundai; Intel 87C; ISSI, Philips, SST, TEMIC, and Winbond IC's
- Size: 6.2"H x 4.3"W x 1.8"D
- Weight: 1.1 lbs.

**Includes:** USB cable, 12V @ 500mA power adapter, CD-ROM software and manual

**System requirements:** Pentium® III 500 or higher, Windows® 98/2000/XP, 20MB hard disk space, and USB port

Part No.	Description	Price
225921EF	Programmer w/ USB Interface	\$249.95

[www.Jameco.com](http://www.Jameco.com)

More programmers and electronic design products on our website. Log on Today!

## Low-cost, high speed, universal EPROM FLASH programmer.

- USB interface to link with PC or Laptop
- Supports low voltage components up to 2.5V; user selectable verify Vcc with one or two-pass verify voltage
- High speed: 30 seconds to process 16Mbits flash memory
- Simple operating software: the programming procedure has only a few automatic process functions (PROJECT, CREATE, COPY, UTILITY)
- Auto detect device pin insertion & contact check
- Select device brand and number by prompt and convenient cross search; FLASH memory auto detection
- Supports EPROM, EEPROM, FLASH EPROM, Serial E/EPROM, NV Rams, Microcontrollers, DSP, PLD and more

- Supports file formats JEDEC, binary, INTEL 80/86 HEX, Motorola HEX, Tektronic HEX (automatic file format detection and connection)
- Size: 6.3"H x 4.3"W x 1.8"D
- Wt.: 1.1 lbs.

**Includes:** USB cable, 12V @ 1.5A power adapter, CD-ROM software

**System requirements:** Pentium II or higher compatible, 32MB RAM minimum, 30MB hard disk space, Windows® 98/ME/2000 operating system

Part No.	Description	Price
225939EF	EPROM/Flash Programmer	\$599.95

Low Cost



**microEngineering Labs****"PICProto" Prototyping Boards**

- High quality blank prototyping boards for PICmicro microcontrollers
- Holds microcontroller, 5V regulator, oscillator, capacitors and DB9-25 connector
- Double-sided board with plated-through holes



**Includes:** Documentation sheet with schematic, suggested parts and placement

**PICProto 18, 18L:** For all 18-pin PICs including PIC16C52, 54, 56, 58, 554, 558, 61, 620, 621, 622, 71, 710, 711, 712, 715, 716, 84, 16CE623, 624, 625, 16F627, 628, 83, and 84

Part No.	Description	Size (L" x W")	1	10
132644EF	PICProto 18	3.0 x 1.5	\$9.95	\$8.95
176891EF	PICProto 18L	3.6 x 4.1	19.95	17.95

**PICProto 3:** For the 28-pin PIC16C62, 63, 642, 66, 72, 76, 773, 16F73, 76, 870, 872, 873, 876, 18C242, and 252

132636EF	PICProto 3	3.0 x 3.0	\$14.95	\$13.49
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**PICProto 64:** For the 40-pin PIC16C64, 65, 662, 67, 74, 77, 774, 16F74, 77, 871, 874, 18C422, and 452

132652EF	PICProto 64	4.0 x 3.0	\$16.95	\$14.95
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**microEngineering Labs****EPIC Plus PICmicro Programmer**

The EPIC Plus Programmer quickly and easily programs the PIC12Cxxx, 12CExxx, 16C505, 16C55x, 6xx, 7xx, 84, 9xx, 16CE62x, 16F62X, 7x, 8x, 87x, 14C000, 17C7xx, 18Cxxx microcontrollers from Microchip. The basic programmer includes an 18-pin socket for programming 8, 14 and 18-pin PICmicro MCUs.

- Simple installation with parallel port (printer) interface
- Interactive software for Windows and DOS
- Command line operation for automated, non-interactive programming

**Requires:** Two 9V batteries or AC adapter (below) **Includes:** Assembler software

Part No.	Description	1	10
132679EF	EPIC Plus PICmicro programmer	\$59.95	\$53.95
162317EF	AC wall adapter (16VDC/500mA, details on pg 36)	7.95	6.95
67256EF	6' DB25 cable (details on pg 68)	6.45	5.79

**microEngineering Labs****PICBasic and PICBasic Pro Compiler**

Converts your BASIC programs into files that can be programmed directly into a PICmicro MCU.

- Compatible with most PICmicro MCU programmers including EPIC plus
- 12C instructions to access external serial EEPROMs
- Use in DOS or Windows (includes Windows editor/DE software)

**132661EF: PICBasic Compiler**

- Expanded BASIC Stamp I compatible instruction set
- Supports PC12C67x, PIC14Cxxx, PIC16C55x, 66x, 7xx, 84, 92x, and PIC16CF8xx microcontrollers
- May use up to 2k of code space

**150543EF: PICBasic Pro Compiler**

- Direct and library routine access to any pin or register
- Automation page boundary handling past 2K
- Real If...Then...Else...Endif
- Built-in LCD support
- Supports 12C5xx, 12C67x, 12CE67x, 14C000, 16C5x, 16C55x, 6xx, 7xx, 84, 92x, 16CE62x, 16F62x, 7x, 8x, 87x, 17Cxxx, and 18Cxxx microcontrollers



Part No.	Description	1	10
132661EF	PICBasic compiler	\$99.95	\$89.95
150543EF	PICBasic Pro compiler	249.95	224.95

**microEngineering Labs****LAB-X1 Experimenter's Module Board**

A pre-assembled experimenter's platform, providing an assembled testbed containing the circuitry commonly used with PICmicro microcontrollers. Projects may be created using the LAB-X1, including calculator, voltmeter, LCD backpack, tone dialer, and RC servo controller.

- 40-pin ZIF socket for PICmicro MCU (not included, PIC16F877-20/P recommended)
- Reset button
- 2 lines x 20 characters LCD module
- RS232 interface
- Socket for real time clock/serial analog to digital converter (devices not included)
- EPIC in-circuit programming connector
- Wiring for microchip in-circuit debug connector

**Requires:** AC adapter (below)

Part No.	Description	1	10
169113EF	LAB-X1 Experimenter Board	\$199.95	\$189.95
176882EF	PIC16F877-20/P microcontroller (pg 21)	9.49	8.49
127976EF	AC adapter (details on web)	4.75	4.25

**Circuit Boards and Accessories****Photo Etch™ Printed Circuit Kit**

Generate your own 1:1 artwork. Then use the patented Fast Neg film process to make a photo negative and sensitize and expose a blank copper board. Finish by developing and etching. No camera or darkroom is required.



Part No.	Prod. No.	Description	1	10
16731EF	12-750*	Printed circuit kit ...	\$39.95	\$36.95

\* Shipped via UPS ground to continental U.S. only

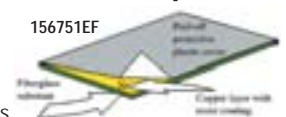
**DATAK****Photo Etch Accessories**

Part No.	Prod. No.	Description	1	10
16758EF	ER8*	Neg. resist dev. 16 oz	\$5.95	\$5.39
16723EF	ER18	TINNIT™ 1 pint	6.95	5.95
70261EF	ER71*	Photo resist liquid	8.95	7.95

\* Shipped via UPS ground to continental U.S. only

**DATAK****Pre-Sensitized Circuit Boards & Developer**

- Pre-coated circuit board
- Size: 3.0"L x 4.0"W x 1/16"T



**Includes:** Instructions

Part No.	Description	1	10	25
156751EF	Single sided	\$4.95	\$4.49	\$3.95
156742EF	Double sided	6.49	5.85	5.25
156734EF	4 oz. Pos. developer*	6.95	5.95	4.95

\* Shipped via UPS ground to continental U.S. only

**DATAK****Dry Concentrated Etchant**

Part No.	Prod. No.	Description	1	10	25
70201EF	ER3	One pint	\$3.95	\$3.49	\$2.95



**More @ [www.Jameco.com](http://www.Jameco.com)**  
Miscellaneous Chemical Products on our website.

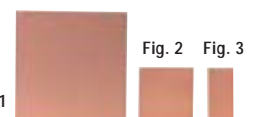
**Copper-Plated Blank Circuit Boards**

Ideal for hobbyists and students doing prototypes of circuits. Copper plating on board for either single-sided or double-sided boards.

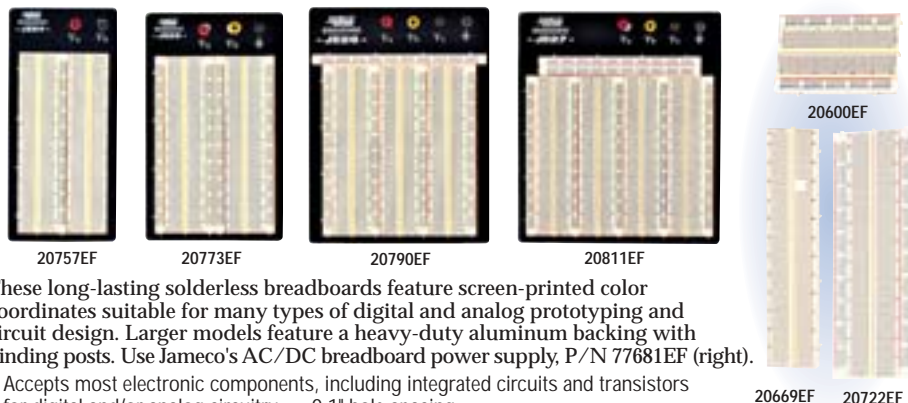
- 1.6mm thickness

Part No.	Mfr. Cross Ref. No.	Description	Size (L" x W")	Fig.	Wt. (lbs.)	1	10	50
169279EF	PCBS3X6	Single side	3.0 x 6.0	3	0.1	\$3.49	\$3.15	\$2.85
169287EF	PCBS6X6	Single side	6.0 x 6.0	2	0.2	4.95	4.49	3.95
169295EF	PCBS12X12	Single side	12.0 x 12.0	1	0.5	13.95	12.56	11.30
169308EF	PCBD3X6	Double side	3.0 x 6.0	3	0.1	4.95	4.45	3.95
169316EF	PCBD6X6	Double side	6.0 x 6.0	2	0.2	7.95	7.15	6.45
169324EF	PCBD12X12	Double side	12.0 x 12.0	1	0.7	17.95	15.95	14.49

Fig. 1



## Solderless Breadboards



These long-lasting solderless breadboards feature screen-printed color coordinates suitable for many types of digital and analog prototyping and circuit design. Larger models feature a heavy-duty aluminum backing with binding posts. Use Jameco's AC/DC breadboard power supply, P/N 77681EF (right).

- Accepts most electronic components, including integrated circuits and transistors for digital and/or analog circuitry • 0.1" hole spacing
- Pins are identified by numbered rows and columns • Ideal for high frequency and low noise circuits
- Low static, plastic body – CMOS safe • Use to breadboard and debug circuit designs
- Nickel-plated clips designed to withstand up to 5,000 insertion cycles
- Breadboard strips connect together to form larger working areas • One-year warranty
- Components are easily interconnected using 20-28 AWG wire (P/N 19289EF & 20079EF, right)
- Some models feature heavy-duty aluminum backings (JE24, JE27)

**Attention Educators! Buy jumper wire (right) in bulk and SAVE!** (see Hook-up Wire on pg 84)

Part Number	Product Number	Terminal Strips	Bus Strips	Contact Points	Binding Posts	Breadboard Size L x W (In.)	Baseplate Size L x W (In.)	Weight (lbs.)	Pricing			
									1	10	50	100
20600EF	JE21	1	2	400	0	3.3 x 2.1	—	0.13	\$4.95	\$4.49	\$3.95	\$3.49
20669EF	JE22	1	0	630	0	6.5 x 1.4	—	0.20	5.49	4.95	4.49	3.95
20722EF	JE23	1	2	830	0	6.5 x 4.0	6.5 x 2.1	0.30	8.95	7.95	7.25	6.55
20757EF	JE24	2	1	1,360	2	6.5 x 3.1	8.5 x 4.0	0.60	12.95	11.95	10.95	9.95
20773EF	JE25	2	4	1,660	3	6.5 x 4.3	8.5 x 5.1	0.80	18.95	16.95	14.95	13.95
20790EF	JE26	3	5	2,390	4	6.9 x 5.8	9.1 x 6.9	1.10	25.95	23.39	21.05	18.95
20811EF	JE27	4	7	3,220	4	7.3 x 7.5	9.5 x 8.3	1.40	31.95	29.95	27.95	25.95

## Digital Design Lab

- Two 7-Segment Displays (digit height: 0.3") • One-year warranty

### Solderless Breadboard

- Interconnected nickel-plated tie points, fitting all DIP sizes and all components with AWG #22-30 (0.3-0.8mm) solid leads • 1580 tie points

### DC Power Supplies

- DC supplies equipped with short circuit protection
- Variable DC power: 0 to +15V & 0 to -15V @ 0.5A
- Fixed power supply: ±5VDC @ 1.0A

### Function Generator (5 ranges)

- Frequency range: 1Hz–10Hz, 10Hz–100Hz, 100Hz–1kHz, 1kHz–10kHz, 10kHz–100kHz
- Sine wave output: 0–8 Vp-p variable • Triangle wave output: 6Vp-p fixed
- Square wave output: ±5V fixed • DCV digital multimeter

Includes: Power cord and manual

Part No.	Description	Size (W" x D" x H")	Weight (lbs.)	1	10	25
75838EF	Digital lab	10.6 x 13.3 x 5.0	8.1	\$276.95	\$249.95	\$226.95

## Digital-Analog Design Lab

### Solderless Breadboard

- 2712 interconnected nickel-plated tie points, fitting all DIP sizes and all components with AWG #22-30 (0.3-0.8mm) solid leads

### DC Power Supplies

- Variable DC output: 0 to +15V & 0 to -15V @ 500mA; Fixed DC output: +5VDC, 1A; -5VDC, 300mA • Input power: 120/220VAC @ 50-60Hz (switchable)

### Function Generator

- Frequency ranges: 1Hz–10Hz, 10Hz–100Hz, 100Hz–1kHz, 1kHz–10kHz, 10kHz–100kHz
- Sine wave output: 0–8 Vpp variable • Triangle wave output: 0–6 Vpp variable
- Square wave output: 0–8 Vpp variable

### Other features:

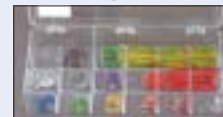
- 2 variable resistors: VR1=1kΩ, VR2=100kΩ • 8 data switches • 2.5" dia. 8Ω, 25W speaker
- 2 pulse switches (2 sets of outputs: A, A, B, B) • 2 banana sockets, 2 BNC jacks • One-year warranty
- Two 7-segment LED displays (digit height: 0.3") • 8 red LEDs with separate input terminals

Includes: Power cord and manual

Part No.	Description	Size (W" x D" x H")	Weight (lbs.)	1	10	25
136266EF	Digital-analog lab	12.8 x 9.8 x 3.7	8.5	\$379.95	\$341.99	\$307.79

## Wire Jumper Kit (350 pcs.)

- 25 each of lengths 0.1" through 5.0" (14 sizes)
- 350 assorted lengths in 13 colors
- Pre-stripped/preformed 22 AWG solid wire jumpers



### 19289EF: 350-piece wire jumper kit

- Handy, durable, clear plastic case

### 20079EF: 350-piece refill for 19289EF

- Case not included

Part No.	Description	1	10	50	100
19289EF	Wire jumper kit ..	\$15.95	\$14.39	\$12.95	\$11.65
20079EF	Refill for 19289EF ..	9.99	8.99	7.99	7.25

## Reinforced Jumper Wires

- 24 AWG-300 volts
- Reinforced pin ends for durability
- 10 pack assortment: 2 each yellow, white, red, black & blue



Part Number	Mfr. Cross Ref. No.	Length (mm / inch)	1	10	100
126341EF	JW100	100 / 3.94	\$4.95	\$4.49	\$4.05

## AC/DC Power Supply



### Output Specifications:

- +5VDC @ 1A; -5V @ 300mA fixed;
- 0 to +15VDC @ 500mA variable;
- 0 to -15VDC @ 300mA variable;
- 12-6-0-6-12 tapped VAC, 300mA fixed

International 120/220VAC Switchable

With built-in short-proof regulated power supplies.

- Input power: 120/220VAC @ 50-60Hz (switchable)
- Indicator lamps and power fuses
- Just plug-in and start to use
- Compact and lightweight • Color: beige
- For both digital and analog circuits
- Compatible with test leads P/N 77841EF, pg 65
- Size: 7.4"W x 5.5"D x 2.6"H
- Weight: 5.5 lbs. • One-year warranty

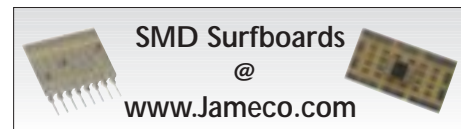
Part No.	Description	1	10	25
77681EF	Power supply .....	\$119.95	\$109.95	\$99.95

## Powered Project Board

- Solderless breadboard with 2420 tie points
- DC power supplies: +5V @ 1A; variable power 0 to +15VDC and 0 to -15VDC @ 500mA
- Back panel has ground terminal
- Outputs are short-circuit protected
- Edge plate for non-DIP size components
- Input power: 120/220VAC @ 50-60Hz (switchable)
- Replacement fuse: P/N 103907EF, pg 39
- Power switch with light • One-year warranty
- Breadboard size: 7.4"L x 6.8"W
- Enclosure size: 9.8"L x 8.0"W x 2.6"H • Wt.: 6.8 lbs.

Includes: Power cord

Part No.	Description	1	10	25
136258EF	Powered breadboard ..	\$99.95	\$89.95	\$87.95



## SMD Surfboards

@

www.Jameco.com



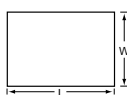
**General Purpose Prototyping Boards**

Select the prototype board that fits your needs from our comprehensive product listing. Prototyping boards with punched holes are convenient, economical tools for assembling circuit components and trying cost-effective alternatives to custom designs.

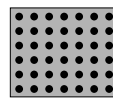
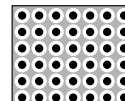
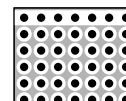
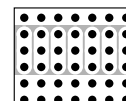
- 0.062" board thickness
- 0.1" hole spacing
- 0.08" pad size
- Plated through pads are double-sided
- PCB material epoxy glass



21434EF

**Board Outline**

21477EF

**Circuit Patterns**A  
Holes OnlyB  
Pad Per HoleC  
Power/Ground Perimeter  
Bus with Pad Per HoleD  
3 Hole Solder Pad  
and Bus

See pg 51 for PCB mounting enclosures and hardware (recommend P/N 106551EF)

Part Number	Product Number	Size (W" x L")	Fits Enclosure(s) (see page 41)	Circuit Pattern	Hole Pads	# Holes x Dia. †	Power/Ground Busses	Connector I/O or Edge	# Mounting Holes x Dia.	Weight (lbs.)	Pricing			
											1	10	50	100
105099EF	2855PCB	1.60 x 2.70	18921	B	single-sided	288 x .035"	none	none	2 x .115"	.02	\$4.95	\$4.49	\$3.95	\$3.59
105101EF	5002PCB	1.50 x 3.50	11957	C	single-sided	365 x .038"	4	none	2 x .140"	.02	6.95	6.25	5.59	4.95
28177EF	PCB1	2.42 x 4.10	18913	C	plated through	674 x .040"	none	none	4 x .120"	.04	5.95	5.35	4.79	4.29
105136EF	2320PCB	3.30 x 4.50	11885	C	single-sided	1266 x .035"	4	none	4 x .140"	.06	9.95	8.95	7.95	6.95
105161EF	2852PCB	3.60 x 7.00	18905, 11973	B	single-sided	2225 x .035"	4	none	4 x .140"	.10	14.95	13.45	11.95	10.95
21434EF	JE401(8001)	4.50 x 6.50	18868	B/D	single-sided	2360 x .042"	2	none	none	.12	20.95	18.95	16.95	15.49
21451EF	JE405(8003)	4.50 x 6.50	18868	C	single-sided	2360 x .042"	1	none	none	.12	19.95	17.95	15.95	13.95
21477EF	JE407(8006)	5.00 x 13.25	N/A	B	plated through	6063 x .038"	none	none	8 x .120"	.28	39.95	35.29	33.49	31.85
105187EF	2507PCB	6.10 x 8.80	18876	C	single-sided	4771 x .035"	7	none	8 x .140"	.21	29.95	26.95	23.95	21.95
37621EF	169P84WE	8.50 x 17.0	N/A	A	drilled only	14448 x .042"	none	none	none	.53	23.95	22.75	21.59	20.49

† All 0.042" diameter hole boards use terminals T44, T49, and T421 (see website)

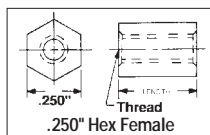
**Hardware, Cabinet and Boxes**

Hex

.187"/.250" Female

**Aluminum & Brass Threaded Standoffs**

† Finish: Iridite (clear)<sup>1</sup> per MIL-C-5541-D; stainless steel<sup>2</sup>  
\* Prepackaged: order in increments of 10, 100 or 1000

**.250" Hex Female**  
4-40 Thread .250" Hex

Part Number	Metal <sup>†</sup>	Hex Length	Pricing			
			1	10	100	1000
139192EF	Alum <sup>1</sup>	.250"	* .16	* .12	* .08	
77500EF	Alum <sup>1</sup>	.375"	* .20	* .15	* .09	
134762EF	Alum <sup>1</sup>	.437"	* .21	* .18	* .15	
108370EF	Alum <sup>1</sup>	.500"	* .25	* .17	* .10	
77518EF	Alum <sup>1</sup>	.625"	.42	.35	.19	.14
133604EF	Alum <sup>1</sup>	.750"	.39	.35	.19	.14



Hex

.250" Male/Female

**.187 Hex Male/Female**  
4-40 x .187" Jack Screws and Hex Nut

169931EF/172603EF/102816EF

108986EF

Part No.	Description (Brass <sup>2</sup> )	1	10	100	1000
169931EF	.275"L jack screws	* .15	* .13	* .11	* .09
172603EF	.315"L jack screws	* .19	* .14	* .11	* .09
102816EF	.435"L jack screws	.49	.46	.41	.37
108986EF	.515"L jack screws	.55	.50	.45	.40

**Component Cabinet**

81701EF



Drawer (85454EF) Divider (85446EF)

- Drawer can be divided into 4 sections (clear)
- Wall mountable cabinet (ABS black)
- Cabinet size: 6.0"D x 15"W x 7.9"H • Wt.: 4.7 lbs.
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Divider size: 2.4"L x 1.1"H

**Includes:** 20 clear plastic drawers, 20 dividers and 30 adhesive I.D. labels

\* Prepackaged: order in increments of 10 or 50

Part No.	Description	1	10	50
81701EF	Component cabinet	\$15.95	\$13.95	\$12.49
85454EF	Drawer for cabinet	.39	.35	.29
85446EF	Divider for drawer	* .19	* .19	* .17

**Plastic Fliptop Case for SMDs****128 Compartments for Surface Mount Components**

- 8 rows x 16 columns grid
- Fliptop openings on each bin
- Color: gray
- Padded cover locks bins closed
- Perfect match to store P/N 156881EF SMD resistor assortment, pg 23
- Size: 11.0"L x 8.3"W x 1.7"Thick
- Weight: 1.4 lbs.



**Includes:** Labels for each bin

Part No.	Description	1	10
164267EF	SMD fliptop case	\$49.95	\$44.99

**Bug Boxes**

- Anti-static plastic
- Fits in bug cage (P/N 11332EF, see web)
- 11341EF: stores sixty 8-pin or thirty 16-pin DIPs
- 11375EF: Designed to store all types of components
- Box size: 4.9"L x 3.3"W x 0.6"H

11375EF



Part No.	Description	1	10	100
11341EF	30 compartments	\$3.95	\$3.49	\$3.15
11375EF	3 compartments/6 vertical & 6 horizontal dividers	4.49	3.95	3.49

**Wall Transformer Enclosures**

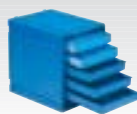
- Enclosures include 3-prong power plug and cable strain relief
- Material: noryl
- Color: black
- Size: 3.4"H x 2.7"W x 2.3"D



Part No.	Style	1	10	100
115051EF	Non-vented	\$2.25	\$1.95	\$1.69
115043EF	Vented	2.25	1.95	1.69

**Over 23 More @ [www.Jameco.com](http://www.Jameco.com)**

Find other Enclosures and Boxes perfect for your applications on our website.



## Prototype Builder Boards, Enclosures and Hardware

Call for additional OEM pricing.

The prototype builder boards on this page are specifically designed to fit into our ABS speedy boxes, die cast aluminum enclosures, aluminum boxes, metal cabinets and heavy-duty instrument cases shown in each grouping. These pre-cut boards have 2 or 4 mounting holes compatible with the PC board mounting hardware listed at the bottom, right (P/N 106551EF).

**Board description:** laminated glass epoxy 1/16" thick fire retardant per FR-4 specs. Copper-clad and solder mask one side. Drilled holes: .035" diameter on .080" square pad. Pads spaced on .10" x .10" grid.



See website for hardware and knobs and more printed circuit board details

### ABS Speedy Enclosures

Will not crack or split when drilled or punched. PCB mounting slots on all four sides. Lid has a lip for precision fit (adds 0.4" height). Complete with four screws and lid. All sizes below are for interior dimensions. • Color: black • ABS plastic



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
18921EF	H2855	3.1" x 2.0" x 0.9"	0.1 ..	\$2.99	\$2.69	\$2.45	\$2.19
18913EF	H2853	4.9" x 2.5" x 1.5"	0.2 ....	3.49	3.15	2.85	2.55
18892EF	H2851	6.0" x 3.5" x 1.9"	0.4 ....	4.49	4.05	3.65	3.29
18905EF	H2852	7.5" x 4.3" x 2.3"	0.5 ....	6.49	5.85	5.29	4.75

### Printed Circuit Boards for Above Enclosures

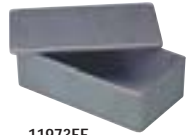
- Power/ground, perimeter bus with pad per hole (\*except P/N 105099EF) • Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105099EF*	2855PCB	2.7" x 1.6"	288 .....	\$4.95	\$4.49	\$3.95	\$3.59
105128EF	2853PCB	4.4" x 2.0"	669 .....	7.95	6.95	6.25	5.59
105152EF	2851PCB	5.5" x 3.1"	1450 .....	9.95	8.95	7.95	6.95
105161EF	2852PCB	7.0" x 3.6"	2225 ...	14.95	13.45	11.95	10.95

### Die-Cast Aluminum Enclosures

High-quality die-cast aluminum cases come with channeled walls for easy PCB mounting. Ideal for RF circuits because the lid forms an effective screen against RFI interference. Made from aluminum, an excellent heat-sink, these cases are great for high temp circuits (up to 600°C). Complete with screws.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
11957EF	B5002	3.9" x 2.0" x 1.0"	0.2 ..	\$5.95	\$5.39	\$4.85	\$4.35
11965EF	B5004	4.7" x 2.4" x 1.6"	0.4 ....	7.95	7.15	6.44	5.79
11973EF	B5006	7.5" x 4.3" x 2.4"	1.2 ..	13.49	12.15	10.95	9.85

### Printed Circuit Boards for Above Enclosures

- Power/ground, perimeter bus with pad per hole
- Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105101EF	5002PCB	3.5" x 1.5"	365 .....	\$6.95	\$6.25	\$5.59	\$4.95
105128EF	5004PCB	4.4" x 2.0"	669 .....	7.95	6.95	6.25	5.59
105161EF	5006PCB	7.0" x 3.6"	2225 ...	14.95	13.45	11.95	10.95

### Aluminum Enclosures

Ideal boxes for those projects that get left lying around! Put them in an economical aluminum enclosure. The enclosure comes in two pieces which slide together.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
11869EF	B2300	4.0" x 2.0" x 2.8"	0.2	\$5.45	\$4.69	\$4.22	\$3.79
11885EF	B2320	5.0" x 4.0" x 3.0"	0.4 ..	7.89	6.15	5.55	4.99
11893EF	B2335	7.0" x 6.2" x 4.6"	0.8	10.95	9.25	8.29	7.49

### Printed Circuit Boards for Above Enclosures

- Power/ground, perimeter bus w/ pad per hole
- Ground Bus • Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105110EF	2300PCB	3.4" x 2.4"	637 .....	\$7.95	\$6.95	\$6.25	\$5.59
105136EF	2320PCB	4.5" x 3.3"	1266 .....	9.95	8.95	7.95	6.95
105179EF	2335PCB	6.5" x 5.0"	2829 ...	14.95	13.49	11.95	10.95

### Metal Enclosures

High-quality metal enclosures are made to suit a large variety of electronics projects and applications. The base is made of aluminum. Slots are located on the sides of the cases for maximum cooling. Cases screw together and come with an attractive two-tone finish.



- Mounting screws and rubber feet included

Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
208901EF	B2741A	4.0" x 3.3" x 2.2"	0.4 ..	\$6.49	\$5.89	\$5.29	\$4.69
208910EF	B2743A	5.9" x 5.3" x 3.0"	0.8 ...	7.99	7.19	6.49	5.89
208928EF	B2744A	7.3" x 6.3" x 2.8"	1.1 ...	8.99	7.99	7.19	6.49

### Printed Circuit Boards for Above Enclosures

- Power/ground, perimeter bus with pad per hole • Plated one side holes

Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105110EF	2741PCB	3.4" x 2.4"	637 .....	\$7.95	\$6.95	\$6.25	\$5.59
206578EF	2743PCB	4.7" x 4.5"	1869 .....	6.99	6.29	5.69	5.19
105179EF	2744PCB	6.5" x 5.0"	2829 ..	14.95	13.49	11.95	10.95

### Heavy-Duty Instrument Cases

Both cases split apart for ease of working. Four plastic feet molded on unit. P/N 18876EF includes ventilation and speaker sound slots. • Color: gray



Part No.	Mfr. Cross Ref. No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
18868EF	H2505	7.9" x 6.3" x 2.5"	0.8	\$7.39	\$6.69	\$5.99	\$5.39
18876EF	H2507	10.0" x 7.5" x 3.1"	1.4 ..	8.99	7.99	7.28	6.55

### Printed Circuit Boards for Above Instrument Cases

- Power/ground, perimeter bus with pad per hole • Plated one side holes

Part No.	Product No.	Size (L x W)	Holes	1	10	50	100
105179EF	2505PCB	6.5" x 5.0"	2829 .....	\$14.95	\$13.49	\$11.95	\$10.95
105187EF	2507PCB	8.8" x 6.1"	4771 .....	29.95	26.95	23.95	21.95

### ABS Enclosures w/ Clear Tops

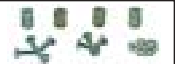
Made of gray ABS plastic w/ clear polycarbonate top cover. Includes screws for mounting boards or electronic components, rubber gasket for a tight seal on your equipment & drilled holes for mounting.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
141831EF	203C1	4.6" x 3.2" x 1.8"	0.3 ..	\$8.95	\$8.09	\$7.25	\$6.55
141840EF	203D1	6.3" x 3.2" x 1.8"	0.4 ..	9.95	8.99	8.09	7.25
141858EF	203F1	7.0" x 5.5" x 2.5"	0.8	11.95	10.79	9.69	8.69

### Mounting Hardware for PC Boards

- 4 spacers, 8 screws and 8 washers



Part No.	Description	1	10	50	100
106551EF	PC board mounting hardware	\$1.79	\$1.65	\$1.45	\$1.35



Fig. 1

### 3M Adhesive Rubber Feet



Fig. 2

Part No.	Product No.	Type	Fig.	Pack	(W" x H")	1	10	50
142658EF	SJ5012BLKC	Black cylindrical	1	100	.50 x .14	\$5.95	\$5.35	\$4.79
142682EF	SJ5018BLKC	Black tapered square	2	100	.50 x .23	9.95	8.25	5.39

More Enclosures & Accessories @ [www.Jameco.com](http://www.Jameco.com)

## Omnidirectional Electret Condenser Microphone Cartridges

### Applications:

- Tape recorders, intercoms, hearing aids, telephone and answering devices, sonic controlled toys and sensors
- Modems for computers
- Used for recording, testing, and monitoring



116505EF



160979EF



136573EF

Part No.	Type	Sensitivity	Impedance	Frequency (Hz)	Max. Op. Volt. (VDC)	Stand Op. Volt. (VDC)	Current (Max.)	Sensitivity Reduction	S/N Ratio	Terminals	Size (H x Dia.)	Pricing			
												1	10	100	1000
116505EF	WM-54PC	-44 ±2dB	>2.2kΩ	20-16,000	10V	2.5V	0.6mA	-3dB @ 2V	>60dB	PC pin leads	.20" x .38"	\$ .69	\$ .62	\$ .50	\$ .33
160979EF	WM-64PKT	-44 ±3dB	>2.2kΩ	20-16,000	10V	2.0V	0.5mA	-3dB @ 1.5V	>58dB	PC pin leads	.10" x .24"	.72	.65	.52	.35
136573EF	WM-60PC	-54 ±2dB	>2.2kΩ	20-12,000	12V	4.5V	0.5mA	-3dB @ 3V	>40dB	PC pin leads	.30" x .38"	.53	.48	.43	.39
140986EF	CRM919	-64 ±3dB	1kΩ ±30%	20-10,000	12V	3.0V	0.8mA	-3dB @ 3V	>40dB	Solder pad	.90" x .39"	1.49	1.14	1.05	.89

## Round Ferrite Speakers

- Pre-tinned speaker lugs
- Large magnet
- Anodized metal surfaces
- Paper diaphragm
- Braided copper voice coil leads

Part Number	Mfr. Cross Ref. No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
			Nom	Max					1	10	100
135589EF	FE200	2.0 x 0.7	0.2	0.4	8	83	420 - 5000	1.3 x 0.4	\$1.59	\$1.33	\$1.09
177130EF	57RF07	2.2 x 0.8	0.5	0.9	45	88	500 - 8000	1.6 x 0.5	.54	.49	.43



135589EF side



135589EF back

## Square Ferrite Speaker

- Pre-tinned speaker lugs
- Large magnet
- Freq. range: 300-14000Hz
- Anodized metal surfaces
- Paper diaphragm
- Braided copper voice coil leads

Part Number	Mfr. Cross Ref. No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Magnet Size (Dia. " x H")	Pricing		
			Nom	Max				1	10	100
99995EF	FEB204	2.6 x 0.9	3.0	4.0	4	95	1.8 x 0.5	\$2.49	\$2.25	\$1.99



back



side

## Buzzers

### Magnetic Buzzer

Part Number	Fig.	Operating Volt. (VDC/mA)	Voltage Range (VDC)	Frequency (Hz)	Sound (dB)	Dimensions	Pricing			
							1	10	100	1000
207984EF	1	1.5/30	1.25 - 2	2300	75	.47"H x .38"Dia.	\$2.99	\$2.69	\$2.45	\$2.15
76064EF	1	5/30	4 - 7	2300	85	.35"H x .46"Dia.	2.99	2.69	2.45	2.19
207976EF	1	12/30	8 - 15	2300	85	.47"H x .38"Dia.	2.49	2.19	1.99	1.69



Fig. 1



Fig. 2

### Piezo Buzzer **SALE**

Part Number	Fig.	Operating Volt. (VDC/mA)	Voltage Range (VDC)	Frequency (Hz)	Sound (dB)	Dimensions	1	10	100	1000
13712EF	1	12/7	3 - 16	4000	80	.30"H x .54"Dia.	\$2.49	\$2.25	\$1.79	\$1.35
207896EF	2	12/120	6 - 15	2800	105	3.4"L x 2.2"W x 1.3"H	7.95	7.19	6.45	5.85
123537EF*	3	24/20	4 - 28	2900	80	1.4"H x 1.7"Dia.	4.19	3.79	3.39	2.95
76021EF	4	24/20	1.5 - 28	3200	95	1.0"H x 1.1"Dia.	4.99	4.49	3.99	3.49

\* P/N 123537EF: dual tone



Fig. 3



Fig. 4

## PowerFilm™ Flexible Thin Film Solar Modules

### Wireless Electronics Series

Bored with cords? Power your portable wireless devices with free, abundant solar energy. The durable, lightweight and ultra-thin panels in our Wireless Electronics Series will integrate seamlessly into any remote or portable application. With a wide range of sizes and specifications, we stock the perfect panel for your AA, AAA, 6-volt and 12-volt recharging or direct power needs.

**NEW**



Part No.	Product No.	Operating Voltage (V)	Operating Current (mA)	Size (L x W x T)		Pricing		
				Inches	mm	1	10	100
227985EF	SP3-37	3.0	22	2.5 x 1.5 x .01	64 x 37 x 0.2	\$3.89	\$3.49	\$3.19
227993EF	TX 3-25	3.0	25	4.5 x 1.0 x .01	114 x 25 x 0.2	2.89	2.59	2.29
171061EF	MP3-37	3.0	50	4.5 x 1.5 x .01	114 x 37 x 0.2	5.89	5.29	5.29
228013EF	MPT3.6-75	3.6	50	2.9 x 3.0 x .01	74 x 75 x 0.2	8.89	7.99	7.19
228021EF	MPT3.6-150	3.6	100	2.9 x 5.9 x .01	74 x 150 x 0.2	17.89	15.99	14.39
228030EF	SP4.2-37	4.2	22	3.3 x 1.5 x .01	84 x 37 x 0.2	5.89	5.29	4.79
228048EF	MPT4.8-75	4.8	50	3.7 x 3.0 x .01	97 x 75 x 0.2	11.89	10.69	9.59
228056EF	MPT4.8-150	4.8	100	3.7 x 5.9 x .01	94 x 150 x 0.2	22.89	20.59	18.49
228064EF	MPT6-75	6.0	50	4.5 x 3.0 x .01	114 x 75 x 0.2	13.89	12.49	11.29
228072EF	MPT6-150	6.0	100	4.5 x 5.9 x .01	114 x 150 x 0.2	27.89	24.99	22.49
228081EF	MP7.2-75	7.2	100	10.0 x 3.0 x .02	253 x 75 x 0.6	24.89	22.39	20.19
228099EF	MP7.2-150	7.2	200	10.0 x 5.9 x .02	253 x 150 x 0.6	39.89	37.99	34.99
228101EF	MPT15-75	15.4	50	10.0 x 3.0 x .02	253 x 75 x 0.6	26.89	24.29	21.99
228106EF	MPT15-150	15.4	100	10.0 x 5.9 x .02	253 x 150 x 0.6	44.89	42.99	39.99

See page 93 for Jameco's latest addition of RC Aircraft Series PowerFilm™

## velleman Solar Cells

The perfect solar cells for students and experimenters in these rugged cases.

- Connection: lead
- 200205EF: 0.5V @ 800mA
- 200221EF: 2V @ 200mA
- 215319EF: 3V @ 100mA
- 215327EF: 6V @ 200mA



215327EF



200221EF

Part No.	Product No.	Size (LxW)	1	10
200205EF	SOL2	2.6" x 3.7" .....	\$7.95	\$7.15
200221EF	SOL4	3.0" x 3.7" .....	8.99	7.99
215319EF	4-3.0-100	3.8" x 2.5" .....	14.29	12.89
215327EF	4-6.0-50	3.8" x 2.5" .....	15.79	14.39

## Photovoltaic Solar Panel

- Output connection: conductive film requiring pressure contact or use of 3M conductive epoxy
- Rated 9.5VDC open circuit; 9VDC @ 0.06A in direct sunlight
- Size: 6"L x 6"W x 0.1"T



Part No.	Description	1	10	50
141751EF	0.5W solar panel .....	\$7.95	\$7.19	\$7.19



## Fume Extractor and Filters

**Absorbs noxious lead fumes using activated-carbon filter and a high-efficiency fan**

- Air flow: 115 CFM
- Operate continuously providing filtered air
- Compact size allows use on work bench with minimum space
- 120VAC, 60Hz, 22 watt
- Noise: 49dB fan
- Fuse protected
- Static ground jack
- On/off power switch
- Aerodynamic hood design for effective removal of solder fumes
- Removable carbon impregnated filter
- One-year warranty
- Black anodized aluminum case
- Size: 6.4"W x 4.6"D x 7.9"H • Weight: 4.6 lbs.



**Includes:** Detachable power cord

Part No.	Description	1	10	25
120150EF	Fume extractor	\$79.95	\$58.95	\$52.95
127183EF	Replace. filters (2/pk) ...	10.95	9.95	8.95

## Weller® 40-Watt Soldering Station

- Lighted on/off switch
- Adjustable power from 5 watts to 40 watts
- 40 watt, 120V @ 60Hz
- Temperature is electronically controlled from 350° to 850°F
- Size: 5.5"L x 4.5"W x 3.5"H • Weight: 1.9 lbs.

**Includes:** ST3 1/8" screwdriver tip, soldering station and manual

Part No.	Prod. No.	Description	1	10
146595EF	WLC100	Soldering station ...	\$48.95	\$44.09

## Weller® Soldering Tips

**Replacement Tips for WLC100, WP25 & WP23**

Part No.	Prod. No.	Description	1	10
146608EF	ST1	Screwdriver tip 1/16" ...	\$5.95	\$5.35
146616EF	ST3	Screwdriver tip 1/8" ...	5.95	5.35
192145EF	ST6	Screwdriver tip .031" ...	5.25	4.75
146624EF	ST7	Conical tip 1/32" ...	5.95	4.95

## Weller® Analog Soldering Station

- Innovative heater and sensor combination for quick heat-up and rapid temperature recovery
- Tip temperature offset capability which allows user to reset temperature readings to match tip size and style
- Wireless temperature lockout
- Auto power down after 90 minutes of inactivity
- Temperature range: 350°F to 850°F (177°C – 454°C)
- Temp. accuracy: ±90°F (±5°C) • ESD safe
- Size: 5.9"L x 4.5"W x 3.6"H • Weight: 4.0 lbs.



Part No.	Product No.	1	10
217461EF	WES51	\$115.95	\$105.95

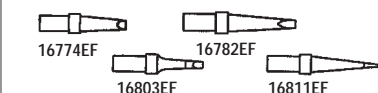
Discover what you are looking for  
@ [www.Jameco.com](http://www.Jameco.com)

More Soldering Equipment on our website.

## Weller® Soldering Tips

**Replacement Tips for WES50**

- Tip leakage: less than 2mV
- Tip to ground resistance: less than 2Ω
- Tips also used with WCC100 station
- Additional tips can be special ordered



Part No.	Prod. No.	Description	1	10
16774EF	ETA	Screwdriver 1/16" ...	\$6.95	\$6.25
16782EF	ETJ	Long screwdriver 1/32" ...	6.95	6.25
16803EF	ETR	Narrow screwdriver 1/16" ...	6.95	6.25
16811EF	ETS	Long conical 1/64" ...	6.95	6.25

## 16 to 30-Watt Variable Soldering Iron, Stand & Sponge

- Length: 7.5"
- 36329EF:

- Black anodized steel base – 5.3"L x 3.3"W
- See below for replacement sponge (P/N 134631EF)
- Fits most soldering irons .85" diameter

**Includes:** Sponge

Part No.	Description	1	10	100
116572EF	Soldering iron	\$16.95	\$15.29	\$13.75
36329EF	Soldering stand	4.25	3.85	3.45
134631EF	Sponge (for 36329EF)	2.99	2.69	2.49

## Weller® Professional 25-Watt & 35-Watt Soldering Irons

- Interchangeable heater elements
- Lightweight handle with cushioned grip
- Quick change knurled collar
- Length: 9" • 120VAC @ 60Hz

**Includes:** Power cord & ST3 tip (left)

Part No.	Prod. No.	Description	1	10
170587EF	WP25	25W solder iron	\$32.95	\$31.35
192102EF	WP35	35W solder iron	39.95	35.95
192153EF	PH25	Solder iron stand	16.19	15.35

## Economical, High-Performance Soldering Irons

High-quality soldering irons that are suitable for both professional and do-it-yourself applications.

- 25W, 40W, & 60W • Length: 9"
- 120VAC; 6' cord with 3-prong plug
- 226000EF (chisel, std.); 226018EF (conical, opt.) – tips for 224611EF/224602EF
- 226026EF (chisel, std.); 226034EF (conical opt.) – tips for 195223EF

Part No.	Product No.	1	10	25
224611EF	200PHG-25W	\$7.95	\$7.15	\$6.45
224602EF	200PHG-40W	9.95	8.95	8.09
195223EF	200PHG-60W	13.95	12.49	12.11
226000EF	44-240517	.95	.85	.79
226018EF	44-240513	.95	.85	.79
226026EF	44-240617	1.95	1.79	1.59
226034EF	44-240603	1.95	1.79	1.59

## SMD Tweezer Iron

- Maximum efficiency ceramic heating elements insures rapid heat-up and instant heat recovery
- Max. temp.: 760°F
- 120VAC
- Heater insulation exceeds 100MΩ
- Heater power consumption: 35W x 2

**Includes:** 0.095" tip

Part No.	Description	1	10	25
168410EF	Tweezer iron	\$59.95	\$53.95	\$48.95
168583EF	Tip .078"	11.95	10.79	9.69
168591EF	Tip .590"	12.95	11.69	10.49

## Electric Desolder Pump

- Easily disassembled for cleaning
- One-hand operation
- Replacement tips available
- UL listed



• Size: 10.5"L x 1.0"Dia.

Part No.	Description	1	10
19254EF	Electric desolder pump	\$26.95	\$23.95
19262EF	1 tip for 19254	4.95	4.49

## One-Shot Desoldering Gun

This low maintenance desoldering gun with self-contained vacuum pump is perfect for desoldering through-hole components.

- Power consumption: 60W
- Interchangeable standard tips
- Zero static tip, 3 wire grounded
- Sensitive where CMOS protection is needed
- Quick release stainless solder collector
- Electronic temperature control • 120VAC
- Ergonomic, lightweight design • One-year warranty
- Gun casing size: 7.0"L x 4.0"W • Weight: 2.2 lbs.

**Includes:** 1.0mm tip

Part No.	Description	1	10	25
129066EF	Desolder gun	\$99.95	\$89.95	\$79.95
140214EF	"Y" replacement tip	10.95	9.95	8.95
134594EF	1.0mm replace. tip	8.95	7.95	7.19
134607EF	1.2mm replace. tip	8.95	7.95	7.19

## PANAMISE Electronic Work Center

- Circuit board holder, standard base, tray base mount, solder station, sponges and wire holder included
- Size: 8.5"W x 7.8"H
- Weight: 5.3 lbs.
- One-year warranty



Part No.	Description	1	5	10
27060EF	Electronic center	\$74.95	\$71.25	\$66.95

## Third Hand

- Frees hands for soldering
- Two adjustable arms with alligator clip jaws
- 2" diameter magnifying lens
- Quick and easy rotation
- Sturdy, heavy base
- Weight: P/N 26690EF: 0.7 lbs.; P/N 72864EF: 1.4 lbs.



Part No.	Description	1	10	50
26690EF	Third hand	\$5.95	\$5.35	\$4.79
72864EF	W/ soldering holder	7.95	7.19	6.49



## Analog Display Soldering Stations

Maintains a steady temperature using a cartridge heating element, providing a longer life for the solid soldering tip.

- Electronic temperature control: 300°F to 850°F
- CMOS devices protected against voltage spikes
- Power consumption: 60W
- Weight: 4.1 lbs.
- Size: 4.3"W x 6.0"D x 3.4"H

Includes: One 1/16" tip

Part No.	Product No.	Description	1	10	25
114569EF	168-3C	Analog display station	Was \$94.95 \$89.95	\$79.95	\$72.95
134640EF	SP815	Replacement sponge for P/N 114569EF	2.99	2.69	2.49



## Desoldering & Soldering/Desoldering Stations

- Simple fine tune feature to select 300–850°F range
- Vacuum pump activated "on demand" using finger tip switch on desolder handle
- CMOS devices protected against voltage spikes
- Replacement sponge for P/N 125516EF – see above (P/N 134631EF)
- One-year warranty

125508EF:

Size: 9.2"L x 7.2"W x 3.6"H; Wt.: 13.1 lbs.

Includes: 3/64" conical tip and solder holder

125516EF/ 223853EF:

Size: 11.0"L x 10.0"W x 4.0"H; Wt.: 18.1 lbs.

Includes: 1/32" conical tip, solder holder, tip cleaner and tweezers

223853EF: Dual display of tip temperature with selector switch for C or F and read/set temperature

Part No.	Product No.	Description	1	10	25
125508EF	968	Desoldering station	\$299.95	\$269.99	\$242.99
125516EF	988	Soldering/desoldering station	399.95	359.99	323.99
223853EF	988D	Dual display soldering/desoldering	459.95	413.95	372.55
207271EF	TWZ60ESD	SMD tweezer iron w/ .078" tip	69.95	62.95	56.95
207221EF	D1A60A	Replacement desoldering iron	74.95	67.49	59.95
168583EF	46-060102	Tip .078" for P/N 207271EF	11.95	10.79	9.69
168591EF	46-060115	Tip .590" for P/N 207271EF	12.95	11.69	10.49

## Rosin Core Solder Rolls

32117EF 141778EF



Part No.	Mfr.	% Composition			Dia. (In.)	Wt. (lbs.)	Pricing			
		Tin	Lead	Silver			1	10	50	100
32117EF	Kester	60	40	0	.031	1.00	\$13.19	\$11.89	\$10.69	\$9.59
141778EF	Super	60	40	0	.031	2.20	13.95	12.95	11.95	10.95

## 300-Watt Solder Pot

Temperature Regulated between 420 – 450°C

- HI/LO switch selectable for temperature
- 2 conductor power cord; 5' 9" long
- Holds up to one 1.1 lbs. solder bar
- Input voltage: 110VAC @ 2.7A; 50-60Hz
- Size: (unit) 4.8"H x 5.5" Dia. (base)
- Size: (tub) 2.4"Dia. x 1.6"D

Part No.	Description	1	10	25
160303EF	300W solder pot	\$64.95	\$58.49	\$52.65

## 600-Watt Solder Pot

Temperature Adjustable

- Tin boiler temp.: 0°C to 500°C
- Input voltage: 110VAC @ 5.5A
- Holds up to three 1.8 lbs. solder bars
- Size (unit): 3.9"L x 1.6"D; (tub): 6.8"L x 5.5"W x 2.8"H

Includes: Skimmer and removable dross tray

Part No.	Description	1	10
172275EF	600W solder pot	\$189.95	\$159.95

## Soldering Tip Cleaner with Stand and Rosin Paste Flux

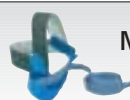
156777EF:

- For cleaning soldering iron tips without the use of water and sponge
- Metal wool for cleaning
- Rubberized base for stability

73584EF:

Highly active non-corrosive and non-conductive flux with excellent wetting action

Part No.	Description	1	10	50
156777EF	Tip cleaner & stand	\$4.95	\$4.49	\$4.05
160004EF	Metal wool replacement	2.79	2.49	2.29
73584EF	Rosin paste flux (2 oz.)	1.79	1.65	1.45



More Anti-Static Products

@ www.Jameco.com

## Temperature Controlled 45-Watt Soldering Station

Grounded Soldering Tip

- 500°F to 850°F • Fully grounded
- Insulated ceramic heating element for rapid heat-up and heat recovery • Wt.: 2.5 lbs.
- Heater insulation exceeds 100MΩ
- Zero voltage circuitry eliminating high voltage spike and magnetic field generation • Size: 7.0"L x 4.5"W x 3.5"H

Includes: Manual and 1.2mm diameter conical tip

Part No.	Product No.	Description	1	10	25
156785EF	379	Soldering station	Was \$69.95 \$59.95	\$53.95	\$48.95
156814EF	XYB01	Sharp conical 1/32" tip	4.95	4.49	3.95
156822EF	XYB04	Conical chisel 1/16" tip	4.95	4.49	3.95
134631EF	SP715	Replacement sponge for P/N 156785EF	2.99	2.69	2.49



## Digital Display Soldering Station

Designed for soldering situations where precise temperature is required for sensitive components.

- Temperature is maintained at ±6°F
- Electronic temperature control from 392° to 878°F
- External calibration port
- CMOS devices protected against voltage spikes
- Power consumption: 60 watts
- Power-on and Heater-on LED indicators
- Size: 5.1"W x 8.0"D x 4.0"H • Weight: 4.8 lbs.

Includes: One 1/16" tip

Part No.	Product No.	Description	1	10	25
162456EF	XY9-60D	Soldering station with ESD	Was \$139.95 \$109.95	\$99.95	\$89.95
168401EF	TWZ50ESD	SMD tweezer iron w/ 0.078" tip	79.95	71.95	64.95
168583EF	46-060102	Tip .078" for P/N 168401EF	11.95	10.79	9.69
168591EF	46-060115	Tip .590" for P/N 168401EF	12.95	11.69	10.49
134631EF	SP715	Replacement sponge for P/N 162456EF	2.99	2.69	2.49

More @ www.Jameco.com

See our website  
for additional Soldering,  
Desoldering Tools & Accessories.



## Analog Display Soldering Station

Maintains a steady temperature using a cartridge heating element, providing a longer life for the solid soldering tip.

- Electronic temperature control: 300°- 850°F
- Isolated power supply: powered by a high quality 24VAC transformer
- Lockout and calibration ports: set and lock the station at a specific temperature as well as an easy access point to calibrate temperatures
- Power: 60 watts
- CMOS devices protected against voltage spikes
- Size: Base unit is 5.2"W X 8.0"D X 3.6"H
- Weight: 5.3 lbs.

Includes: XY404 soldering tip

Part No.	Description	Price
219627EF	60-Watt analog soldering station	\$99.95



## 5" Wire Cutter/Stripper

- Insulated handles
- Spring return
- Tempered steel cutting edge
- Adjustment for wire gauges
- Size: 5.0"L x 3.0"W
- For 10-30 AWG wire
- One-year warranty



Part No.	Mfr. Cross Ref. No.	1	10	50	100
78991EF	HT108	\$3.95	\$3.49	\$2.95	\$2.59

## Automatic Wire Strippers

- Strips 8-22 AWG wires
- Spring load grip
- Size: 7.0"L x 2.5"W
- Weight: 0.8 lbs.



Includes: Wire stopper for desired strip length

Part No.	Description	1	10	25
175097EF	Auto wire stripper	\$15.95	\$14.39	\$12.95

## 6" Premium T6 Wire Stripper

- Contoured cushion-grip handles
- Wire size markings, in AWG and mm
- 16-26 AWG stranded
- Size: 6.0"L x 2.0"W



Part No.	Product No.	Description	1	10
161234EF	ID45-216	T-6 16-26 AWG	\$15.95	\$14.49

## Nibbling Tool

- Perfect for cutting, trimming, or notching sheet metal up to 18 AWG
- Time-saver when working on prototyping, chassis, and circuit boards
- Minimum .375" hole required
- Size: 7.8"L



Part No.	Prod. No.	Description	1	10	25
18809EF	HT204	Nibbling tool	\$8.95	\$7.95	\$6.95
29330EF	HT204B	Replacement bit	4.95	4.49	3.95

## Impact Punch-Down Tool

- Reversible clip-in blade
- Adjustable (HI-LO) spring-loaded impact mechanism
- Storage bin on handle for spare blade



175071EF



175089EF

175071EF:

Punch-down tool with blade

- For 66-type terminals
- Size: 5.2"L x 1.5"W x 1.0"H

175089EF: Punch-down blade

- Blade for 110-type terminals

Part No.	Description	1	10
175071EF	Tool w/ 66 blade	\$39.95	\$35.95
175089EF	Punch-down blade 110	14.95	13.49

## IDC Connector Crimping Tool

- Crimping distance: 27.5mm to 6mm (with attachment)
- Cushioned red handles
- Crimp insulation displacement connectors
- Use for IDC socket connectors, pg 44
- Size: 9.2"L x 3.0"W



Part No.	Product No.	1	10	25
73251EF	HT214	\$14.95	\$13.49	\$12.15



## Non-Insulated Terminal D-Sub Crimping Tool

14-26 AWG

- Metal crimping tool with cutter and insulated handles
- For computer pins, sockets and D-sub 26-28 AWG wire
- For butt-insulated connectors, 22-26 AWG wire
- Coiled spring return
- For telephone spade lugs, 22-26 AWG wire
- For non-insulated connectors, 20-22 AWG wire
- For non-insulated connectors, 14-18 AWG wire



Part No.	Product No.	1	10	25	100
99442EF	HT202A	\$8.95	\$7.95	\$6.95	\$6.29



## D-Sub Crimping Tool

20-28 AWG

- Crimps D-sub pins and sockets
- Size: 7.0"L x 4.0"W



Part No.	Product No.	1	10	25
159265EF	HT213	\$9.95	\$8.95	\$7.95



## Ratcheted BNC Crimping Tool

- Crimps RG58, RG59, RG62, RG174 and fiber optic
- All steel construction



Part No.	Product No.	1	10	25
114534EF	HT-3019	\$22.95	\$19.95	\$17.95

## Terminal Wire Crimping Tool

- Crimps solderless terminals: 18-22 AWG red, 14-16 AWG blue and 10-12 AWG yellow
- Size: 9.0"L x 2.0"W



Part No.	Mfr. Cross Ref. No.	1	10	25
72995EF	HT303	\$17.95	\$15.95	\$13.95

## Magnetic Tip Measuring Tape

Measuring with a regular tape measure is not easy, especially if you are working single-handed with metal materials.

With this measuring tape, you can easily clamp on to metal surfaces with its magnetic hook and make precise measurements.

- Magnetic end hook for convenient measuring and TRU ZERO function
- Blade with nylon coating for easy scale reading
- Anti slip and shockproof rubber case
- Heavy duty spring & blade system
- Extends 25'



Part No.	Description	1	10
215415EF	Magnetic tip tape measure	\$13.85	\$12.59

## 3X Magnifying Lamps

- 45" extension arm
- .49" Diameter lens
- Supplied with 22-watt Circuline tube
- Extra strong, all-metal mounting base w/ electrical outlet
- New wire clip design permits easy installation
- Power requirement: 110VAC/60Hz

SALE



Part No.	Description	1	10	25
100829EF	Black lamp	\$62.95	\$59.95	\$53.95
149981EF	White lamp	\$60.95	\$59.95	\$53.95

## Standard Adjustable 3X Magnifying Lamp

- 4" Diameter lens
- Maneuverable 30" arm extension
- Lamp tilts or turns in any direction
- Uses 60W incandescent bulb (not included)
- Power requirement: 110VAC/60Hz



Part No.	Description	1	10	25
22710EF	Magnifying lamp	\$29.95	\$26.95	\$23.95

## Precision 5X Magnifying Lamp

With an arm that extends to 40" long, adjustable to any direction or angle, and 5X magnifying glass with built-in light, this is the perfect tool to help identify small electronic components and for soldering electronic components.

- 5" diameter lens
- Weight: 7.1 lbs.
- Power requirement: 110VAC/60Hz

Includes: 22W circuline fluorescent bulb



Part No.	Description	1	10	25
197456EF	Magnifying lamp	\$109.95	\$98.95	\$88.95

## 55-Piece Tech Tool Kit

Perfect for general & precision work

Kit includes:

- Screwdriver handle, 6-pc. mini-hammer set, 5-pc. of double edge blade, 3-pc. soldering aid kit, 3-prong holder, 7-way crimping tool, 6 precision screwdrivers, 7-pc. hex key wrench, 30W soldering iron, adjustable wrench, anti-static strap, 8" linemans pliers, bent needle nose pliers, brush, desoldering pump, diagonal cutting pliers, flat nose pliers, utility knife, IC extractor, mini flashlight, 5 needle files, needle nose pliers, rosin core solder, 2-pc. screwdriver set and 2 tweezers
- Carrying case has outer velcro pockets to store paperwork, etc.
- Size: 17.6"L x 12.8"W x 4.0"H
- Weight: 9.2 lbs.



Part No.	Description	1	5
136311EF	55-piece tool kit	\$129.95	\$116.95

## 66-Piece Tech Tool Kit

Kit for Field Technicians and Engineers!

Kit includes:

- Mini vacuum cleaner; cassette head cleaning fluid; keyboard/monitor spray cleaner; long nose pliers w/ cutter; hobby vice; 3-pc. soldering aid kit, 3-prong holder, 5-way crimping tool, 6 long precision screwdrivers, 10-pc. (SAE) mini wrench set; 30W soldering iron; adjustable wrench, anti-static strap, 8" linemans pliers, brush, desoldering pump, diagonal cutting pliers, digital multimeter, electrical test screwdriver, electricians tape, heat sink, flat nose pliers, utility knife, IC extractor, mini drill, mini flashlight, 5 needle files, needle nose pliers, rosin core solder, 13-pc. screwdriver set, soldering stand, stainless steel scissors, tweezer, utility components box and carrying case
- Size: 18.0"L x 14.0"W x 6.0"H
- Weight: 15.5 lbs.

SALE



Part No.	Description	1	5
105646EF	66-piece tool kit	\$185.95	\$167.39



**"GripP-STRIPPER"  
Wire****Cutter/Stripper**

The newest wire stripper and cutter from Paladin Tools. Combines ergonomic design and versatility. Strips and cuts stranded and solid wire and cable using only two tools for the most common types: electrical wire, hook-up wire, multi-conductor cable, and flat cables.

- The tool head and handles are designed at optimum 22° angle to prevent awkward wrist bends
- Spring loaded closure
- Contoured wire stripping areas precision ground for accuracy
- Non-scoring strip and smooth wire cutting
- Features screw cutter and wire loops embedded in frames
- Gripping jaws on front of tool
- Size: 7.1"L x 2.3"W x .65"D
- One-year warranty

Part No.	Product No.	Description	1	10
230463EF	1117	For 10-22 AWG	\$14.69	\$13.25
230471EF	1118	For 20-30 AWG	14.69	13.25

**Data SureStrip™ Universal  
Cable Cutter/Stripper**

This multi-purpose tool is a universal easy-to-use cable cutter and stripper for data, telephone, and network installations. Works with standard wires and can be used with coaxial cable by adjusting the blade for various strip depths.

- Cuts and strips multiple cable types: 4/6/8-conductor flat satin cables; 4/6/8-conductor UTP/STP data cables, 25-pair UTP/STP data and telephone cables; multi-conductor round bundled cables of up to 0.5" diameter; 14-8 AWG wire
- Small and compact, slips right into your pocket
- Works left or right handed
- Fully adjustable with simple thumb screw
- Self-regulating to prevent nicking
- Contoured finger grips for power cutting
- Length: 4.5"
- One-year warranty

Part No.	Product No.	1	10
230447EF	1116	\$19.89	\$17.89

**Xcelite® Wire Cutter**

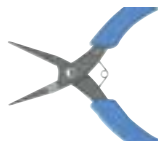
- Spring return
- Micro series wire cutter – flush; 6"

Part No.	Product No.	1	10	50	100
146712EF	170M	\$5.95	\$5.35	\$4.79	\$4.29

**5.3" Half-Round  
Long Nose Pliers**

- Stainless steel
- Spring return
- Durable rubber handles
- 5.3" length with 1.4" plier nose
- Knurl jaws

Part No.	Description	1	10	50	100
35490EF	Half round	\$4.95	\$4.49	\$3.95	\$3.49

**NEW****NEW****Nylon Cable Ties****Weather Resistant**

104141EF

- Contain Carbonate A for greater resistance to ultra violet rays in outdoor use
- Color: black
- Sold in increments of 100s or 1000s

Part No.	Tensile Strength (lbs.)	Dimensions (L" x W")	100	1000
104141EF	18	4.0 x 0.10	\$0.44	\$0.29
190781EF	40	8.0 x 0.13	.085	.065
190801EF	40	13.0 x 0.14	.113	.088

**Cable Tie Assortments**

- Tensile strength: 18-50 lbs.

**145701EF:**  
1000 pcs. (4"L); 10 colors

**150412EF:**  
500 pcs. (4"L); 300 pcs. (8"L);  
50 pcs. (11"L), 5 colors

Part No.	Weight (lbs.)	1	10	50
145701EF	0.7	\$9.49	\$8.49	\$7.39
150412EF	1.7	13.95	11.49	9.95



145701EF (closeup)

**Nylon Cable Tie Mount**

- Screw tab & cradle mount adhesive
- 1.1" square adhesive 4-way cable tie used with 0.2"W max
- Sold in increments of 10, 100 or 1000

Part No.	Description	10	100	1000
71394EF	4-way cable tie	\$0.23	\$0.19	\$0.14



Our complete selection is  
@ [www.Jameco.com](http://www.Jameco.com)



Other Cable Tools  
and Accessories  
available online.



Each end has a unique point to  
fit the right situation and position.

**Spring-hook set makes  
the job faster and easier.**

Grab or place in position springs and wires in those hard-to-reach areas with these 8" long spring-hook tools.

Part No.	Description	Price
226042EF	Spring-Hook Set	\$5.95

**30-Day Money Back Guarantee**

If you're not satisfied, we'll take it  
back! Details on page 97.

**Heat Gun/Stripper****Dual-Setting**

- Use with heat shrink material
- Works with spot-dry paint, plaster, spackle cure adhesives
- Will remove adhesive-applied tiles and linoleum without chipping
- Dual heat setting: 600°F/1100°F
- Thaw pipes, frozen locks and loosen rusted bolts



UL

Part No.	Description	1	10	25
76865EF	Heat gun	\$39.95	\$35.95	\$31.95

**Weller® 250-Watt, 3-Setting  
Industrial Heat Gun**

- 750°F to 800°F hot air at nozzle; 3-position switch; hot-off-cool
- Designed for assembly and repair applications such as shrink tubing and vinyl, epoxy curing/drying/cooling
- Long-life heater and fan components
- ESD safe
- 120VAC @ 60Hz
- 3-wire grounded plug; 6' cord



Part No.	Product No.	Description	1	10
191943EF	6966C	Heat gun	\$119.95	\$107.95

**PVC Heat Shrink Tubing**

- 2:1 uniform shrink ratio
- Color: black
- Shrink temp: 125°C
- Sold in 10' and 100' increments
- UL/CSA approved



182748EF

182772EF

Part No.	Dia. before (mm)	10 ft.	100 ft.
184721EF	.12" (3)	\$1.19	\$10.50
182730EF	.16" (4)	1.39	12.50
182748EF	.20" (5)	1.45	13.00
182756EF	.24" (6)	1.49	13.50
182764EF	.31" (8)	1.79	16.00
182772EF	.43" (11)	2.80	19.00
182781EF	.59" (15)	3.50	30.00

**D-Sub Pin Insertion/  
Extraction Tool**

- Material: Red/white plastic body
- Exchangeable tips

**SALE**

Part No.	Description	1	10	100
19094EF	Tool	\$2.79	\$2.49	\$2.15

**6-Step Drill Tool****3/16" to 1/2"**

Drill multiple holes in thin material with the same bit, faster and easier. You can drill holes in most materials such as plastic, metal, and wood up to 1/8" thick. No center punching on most sizes.

- Material: High-speed steel

Part No.	Description	Size	1	10	25
172401EF	Step drill	3/16" to 1/2"	\$9.95	\$8.95	\$7.95



## Aerospace-designed wrench works in half the space of others!

Now, *this* is cool. If you've ever found yourself under a kitchen sink, cursing and bleeding while trying to get at a tough nut, listen up. These wrenches developed for the aerospace industry ratchet in just 30° of space – *half* the space of other open-end wrenches. So you can install or remove nuts and bolts in extremely tight spots in seconds. The more torque you apply, the tighter the movable head grips the fastener, so you can forget about slipping or stripping. Yet you can slip them

off with ease—no wiggling. The wrenches are made of solid 17-4 stainless tool steel, so they can't flake or chip like chrome-plated tools. The SAE set fits 3/8"-7/8", 1/2"-9/16", 5/8"-11/16". The metric set fits 10-12, 13-14, 15-17. They're so indestructible, the AldenWrench guarantees them for life!

Part No.	Description	Price
223896EF	3-Piece Wrench Set (SAE) .....	\$34.95
223909EF	3-Piece Wrench Set (Metric) .....	34.95



*With a ratcheting angle of just 30°, these wrenches work where others don't. Why didn't someone think of it sooner?*

### Mini-Drill and Stand

This Mini Drill is excellent for drilling through circuit boards and protoboards. The drill comes with an array of drilling, grinding and sanding attachments. Drill stand is designed to function like a drill press.



Shown w/ drill (26702EF) & stand (26711EF)

Part No.	Description	Wt. (lbs.)	1	10	25
26702EF	MS398 drill	0.8 .....	\$29.95	\$26.95	\$23.95
26711EF	MS399 stand	1.8 .....	19.95	17.95	15.95

### 9-Piece Assorted Drill Bit Kit

- Variety of sizes: .014" to .126"
- Each kit will vary in contents of bit sizes
- Shank diameter: .125"

Includes: Plastic case



Part No.	Description	1	10	50
131676EF	9-piece drill bit kit ....	\$9.95	\$8.95	\$7.95

### PC Board Drill Bits



**SALE**

- Reconditioned carbon steel bits
- High quality long lasting cutting edge
- Shank diameter: .125"
- Use for drilling holes in glass PC boards

Part	Drill					
No.	Dia.	No.	Application	1	10	100
16619EF	.021"	75	Miscellaneous ...	\$1.39	\$1.25	\$1.15
16580EF	.040"	59	Plated thru holes	1.39	1.25	1.15



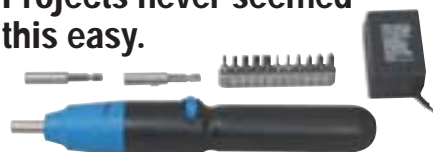
### 29-piece driver socket wrench set.

Kit includes:

- Flank drive socket (6 pt): 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, and 13mm
- Slotted bit: 4mm, 5.5mm, and 7mm
- Hex bit: 3mm, 4mm, 5mm, 6mm, and 8mm
- Phillips bits: #1 and #2
- Pozi bits: #1 and #2
- Extension bar with spinner handle
- Universal joint
- 2" extension bar • Sliding T-bar
- Pear-type ratchet handle with quick release

Part No.	Description	Price
226229EF	29-Piece Socket Wrench Set .....	\$29.95

### Save time and your wrist. Projects never seemed this easy.



Get 40 inch/lbs. of torque for starting and finishing screws. Our 4.8 volt rechargeable cordless screwdriver with a 180 RPM motor has a spindle lock for greater control. Includes 2 magnetic bit holders, 11-piece bit set (5 slotted, 3 phillips, 3torque), and power supply at no extra cost.

- Narrow nose for extended reach in tight places
- Construction grade quality
- Recharges in 7 – 9 hours
- Size: 10.5" long • Weight: 1.4 lbs.

Part No.	Description	Price
211254EF	Cordless Screwdriver Set .....	\$18.95

**More Tools**  
@ [www.Jameco.com](http://www.Jameco.com)

### Handy and compact offset ratchet bit and socket driver set.

This offset ratchet and socket driver set is comprised of 6 hexagon sockets made from quality hardened carbon steel. The handle features a 1/4" male-head drive to accommodate the bits and sockets with this set.

Kit includes:

- Slotted bits: 4mm, 5mm, and 6mm
- Torx bits: T10, T15, and T20
- Reversible driver handle with male head
- Slotted bits: #1 and #2
- Hex sockets: 3/16", 7/32", 5/16", 11/32", and 3/8"
- Pozi bits: #1 and #2

Part No.	Description	Price
226069EF	17-Piece Offset Ratchet and Socket Driver Set .....	\$7.49



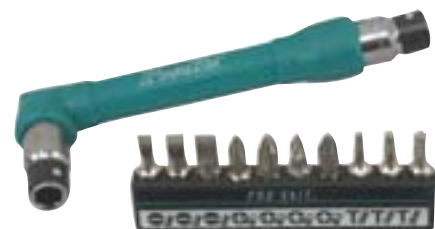
### Those hard to reach areas? This simple tool does the trick.

The handle of this twin wrench driver set has two tips, horizontal and vertical for those hard to reach areas and the non-slip grip prevents bruised knuckles and fingers. Bits are organized and labeled according to type & size.

Part No.	Description	Price
223811EF	Twin Wrench Driver Set .....	\$3.95

Included in the set are:

- Non-slip double ended driver
- Three slotted bits: 4mm, 5mm, and 6mm
- Phillips bits: #1 and #2
- Pozi bits: #1 and #2
- TORX bits: 10mm, 15mm, and 20mm



## Now drive screws in hard-to-reach places, even around corners.

This mini-ratcheting handle and 7.5" flexible shaft makes it easy for you to loosen and tighten hard-to-reach screws.

**Includes:** Flexible shaft (190mm), mini ratchet handle that has forward, reverse and conventional settings, slotted bits (4mm, 5mm & 6mm), Phillips (#1 & #2 bits), Pozi (#1 & #2 bits) and TORX (10, 15 & 20mm bits)

Part No.	Description	Weight	Price
223802EF	Flexible Ratchet Driver Set	0.6 lbs.	\$7.95

## Handy precision screwdrivers.

Projects will be easier and more enjoyable with this precision screwdriver set.

### Kit includes:

- 0.9mm, 1.2mm, 1.4mm, 1.8mm 2.4mm, and 3mm slotted screwdriver
- #00, #0, #1 and Phillips screwdriver
- Awl • Magnetic pick-up

Part No.	Description	Price
226093EF	11-Piece Precision Screwdriver Set	\$4.49



## 33-piece ratchet driver set.

High torque reversible ratchet handle with forward, reverse, and conventional settings. Magnetic shaft holds steel screws to bit for easy positioning. Bits can easily be stored in handle for easy transport.



### Kit includes:

- Reversible ratchet handle
- Torx bits: T6, T7, T8, T9, T10, T15, T20
- Nut bits: 3/16", 9/32", 5/16", 11/32", 7/16"
- Hex bits: 1.5mm, 2.0mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm
- Pozi bits: #0, #1, #2
- Phillips bits: #0, #1, #2
- Slotted bits: 3mm, 4.7mm, 6.3mm
- 50mm adaptor
- Size: 9.1"W x 7.6"H x 2.0"D
- Weight: 1.7 lbs.

Part No.	Description	Price
226051EF	33-Piece Ratchet Driver Set	\$19.95

**More @ [www.Jameco.com](http://www.Jameco.com)**

## 30 well-organized and identified bits.



A 30-piece bit set organized in a neat, compact storage drum. All bits are compatible with power tools, rechargeable drills, and multi-bit screwdriver handles.

### Set includes:

- Nut bits: 7/16", 3/8", 11/32", 5/16", 9/32", 3/16"
- Hex bits: 3/16", 1/8", 7/64", 5/64"
- Torx bits: T10, T15, T20, T25, T30
- Slotted bits: #3, #4, #5, #6, #7
- Pozi bits: #1, #2, #3
- Bit holder
- 2 screw aligners
- Phillips bits: #0, #1, #2, #3

Part No.	Description	Price
227230EF	30-Piece Bit with Drum Organizer	\$9.95

## Compact, heavy-duty metric nut drivers.

This set of heavy-duty nut drivers are ideal for service/repair or manufacturing environments or anywhere you encounter small metric components.

- Metric
- Molded plastic case
- 31.35mm shaft hole depth

**Includes:** 4mm through 8mm, 10mm, 11mm, 13mm

Part No.	Description	Price
218042EF	Xcelite Heavy Duty Nut Driver Kit	\$59.95



## Super-bright, waterproof and shockproof LED flashlight.

Need to depend on a flashlight that always works?



Super Bright White LEDs!

Its super bright white LEDs have a life of at

least 11 years of continuous use. This heavy-duty flashlight is waterproof and designed for all weather conditions. It's shockproof casing was built to withstand a drop from 4'. LED flashlights have a low cost per hour of operation because batteries last 14 times longer than in conventional flashlights. The 10-LED flashlight lasts a month of continuous use on three "D" cell batteries. The 7-LED flashlight uses 3 "C" cell batteries and lasts 25-days of continuous use. The 4-LED model lasts 14-days of continuous operation using three "AA" cell batteries.

Part No.	Description	Price
215677EF	10-LED 10.6" Flashlight	\$59.95
215685EF	7-LED 8.9" Flashlight	49.95
215693EF	4-LED 7.9" Flashlight	34.95
197000EF	2x C, 2300mAh Rechargeable Batteries	8.95
196998EF	2x D, 2300mAh Rechargeable Batteries	8.95

## Finally, security bits needed to bypass those bizarre screwheads.

This security bit set contains most of the bits commonly used in today's electronic products to make them tamper resistant. Now you can open the cases of these products to repair them without damaging the case or screw. Bits are housed in a honeycomb plastic case.



### Kit contains:

- Torx bits: 4mm, 6mm, 8mm, & 10mm
- Tri-wing bits: #1, #2, #3, and #4
- Security hex bits: 2mm, 2.5mm, 3mm, 4mm, 5mm, and 6mm
- Security hex bits: 5/32", 9/64", 1/8", 7/64", 3/32", and 5/64"
- Security torx bits: T8, T10, T15, T20, T25, T27, T30, T35, and T40
- 60mm magnetic bit extension

Part No.	Description	Price
223829EF	32-piece Security Bit Set	\$11.95



## Grind, sand, polish, engrave, file, drill, brush... all with one tough tool!



**There's almost no mechanical job around your house or workbench that can't be made faster and easier with this heavy-duty variable-speed rotary tool.**

Destined to become the most-used tool at your workbench or around your home, this variable speed rotary tool with 40-piece accessory kit does it all. Grind, file, cut, engrave, polish, drill – you'll wonder what you ever did without it! Adjust the speed infinitely from 8,000 to 30,000 RPM without stopping. High speed and low torque do all the work, so you can guide the tool effortlessly and precisely. A handy shaft-lock button lets you swap accessories quickly. Built with a tough nylon housing and 18 AWG cord, it can take any abuse you dish out.

**You get all this in a heavy-duty plastic carrying case:**

- 9" long variable speed rotary tool
- Drum sander wheel
- Drum sander pads
- Felt buffing pads
- Grinder dressing stone
- Disk sanding arbor
- Disk sanding pads
- 10-piece rotary grinders
- 4-piece rotary files
- 1-year manufacturer's warranty
- Disk grinder
- Drill bit
- Wrench

Part No.	Description	Price
211289EF	Electric Grinder .....	\$44.95

**Bulk packs are available for every item. For more details log onto [www.Jameco.com/Rotary](http://www.Jameco.com/Rotary)**

For images please visit <a href="http://www.Jameco.com">www.Jameco.com</a> .	EXPANSION BIT SETS							
	Choose the right set for the job.							
Description	226616EF	226675EF	226624EF	226632EF	226608EF	226667EF	226641EF	226659EF
Band sander, 3/8"Dia.	10	5						
Band sander, aluminum oxide, 1/2"Dia.	10							
Brush bit, bristle, 9/16"Dia.							1	
Brush bit, copper, 3/8"Dia.							1	
Brush bit, steel, 9/16"Dia.		1					1	
Brush wheel bit, bristle, 1.0"Dia.							1	
Brush wheel bit, copper wire, 1.0"Dia.		1						1
Brush wheel bit, copper wire, 3/4"Dia.								1
Brush wheel bit, copper, 1"Dia.							1	
Brush wheel bit, steel, 1.0"Dia., 1-3/4"L							1	
Cork bit, cylindrical, 1/4"Dia., 1.8"L						1		
Cork bit, cylindrical, 5/16"Dia., 2.0"L						1		
Cotton bit, 5/16"Dia., 1-3/4"L		1				1		
Cotton bit, 5/16"Dia., 1-7/8"L						1		
Cut-off wheel, alum. carbide, 7/8"Dia., 0.01"T					4			
Cut-off wheel, alum. carbide, 15/16"Dia., 0.02"T (metal)		8			18			
Cut-off wheel, alum. carbide, 15/16"Dia., 0.02"T (wood)		4			6			
Cut-off wheel, alum. carbide, 1.0"Dia., 0.02"T					18			
Cut-off wheel, alum. carbide, 1-1/4"Dia., 1/16"T					4			
Drum sander, 1/2"Dia.	1							
Drum sander, 3/8"Dia.	1	1						
Engraver point, 5/64"W, 1-3/4"L (bullet tip, round cut)		1	1					
Engraver point, 0.1"W, 1-3/4"L (fine point, V-cut)			1					
Engraver point, 0.1"W, 1-3/4"L (ball tip)			1					
Engraver point, 1/8"W, 1-3/4"L (ball tip)			1					
Engraver point, 0.15"W, 1-3/4"L (shaft, flat cut)			1					
Engraver point, 5/32"W, 1-3/4"L (flat head)		1	1					
Engraver point, 5/32"W, 1-3/4"L (arrow head, V-cut)			1					
Grinding stone bit, alum. oxide, 1/8" & 5/32"Dia.				1				
Grinding stone bit, alum. oxide, 3/16"Dia. (bullet head)				1		1		
Grinding stone bit, alum. oxide, 3/16"Dia. (cylindrical)				1		1		
Grinding stone bit, alum. oxide, 1/4"Dia. (blunt nose)				1		1		
Grinding stone bit, alum. oxide, 1/4"Dia. (cylindrical)		1		1		1		
Grinding stone bit, alum. oxide, 1/4"Dia. (tear drop)				1				
Grinding stone bit, alum. oxide, 1/4"Dia. (bullet head)		1		1				
Grinding stone bit, alum. oxide, 5/16"Dia.		1		1				
Grinding stone bit, alum. oxide, 1/2"Dia. (blunt nose)		1		1				
Grinding stone bit, alum. oxide, 1/2"Dia. (tear drop)				1				
Grinding stone wheel, aluminum oxide, 7/8"Dia.		1						1
Mandrel bit, 1/8"W, 1-13/16"L		1						1
Wool polishing wheel, 1/2"Dia.								1
Wool Polishing wheel, 1.0"Dia.		1						1

Part No.	Description	Price
226616EF	22-Piece Drum Sander Set.....	\$13.95
226675EF	30 Piece All Purpose Bit Set.....	\$28.95
226624EF	7-Piece Engraving Cutters Bit Set.....	\$17.95
226632EF	10-Piece Grinding Stone Bit Set .....	\$11.95
226608EF	50-Piece Cut-Off Wheel Set.....	\$24.49
226667EF	Cylindrical Grinding and Polishing Set .....	\$12.95
226641EF	6-Piece Rotary Brush Set .....	\$15.95
226659EF	7-Piece Rotary Finishing Set.....	\$9.99

## Designed for the perfect cut.

Cut smooth accurate holes from 3/4" to 5" diameter in drywall, wood, plaster, aluminum, laminates, and plastic. With the 1/4" and 3/8" mandrels you can use it with any battery or electric drills.

- Hole saw diameters: 3/4", 7/8", 1 1/8", 1 1/4", 1 1/2", 2", 2 1/2", 3", 3 1/2", 4", 5"
- 1/4" & 3/8" drive mandrels
- Size: 8.0"L x 6.0"W x 1.9"H
- Allen wrench
- Weight: 2.8 lbs.

Part No.	Description	Price
211262EF	12-Piece Hole Saw Kit .....	\$18.95

## Juice NiMH batteries yourself!

Charge your AA or AAA NiMH batteries with this 8-hour battery charger. Simply plug into a wall outlet. Red LED indicates charging and green LED indicates ready to use.

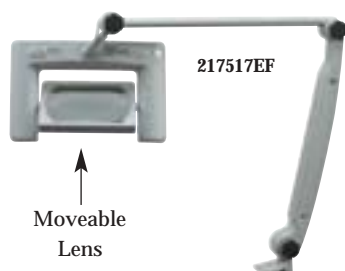
- Charging bay allow 4AA or 4AAA batteries to be charged at the same time
- Output: 4AA 1.35V @ 250mA or 4AAA 1.35V @ 95mA
- Size: 2.8"W x 2.4"D x 4.6"H
- Weight: 1.0 lb.

Part No.	Description	Price
217533EF	NiMH Battery Charger .....	\$7.95

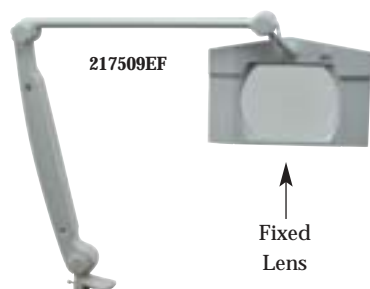
See page 95 for our latest batteries.



## Adjustable or fixed lamps illuminate & magnify 3X



Need a flexible magnifying solution at a terrific price? Our adjustable rectangular 3-diopter 7.0"x 4.5" diameter lens allows the magnifier independent movement from the light for best viewing angles. On-off buttons control the top and side lights separately, allowing varying light intensity.



Save \$10 by choosing the fixed-magnifier lamp with a 7.0" x 5.5" diameter 3-diopter lens for a wider viewing area. One on-off switch controls top and side bulbs in unison. Both lamps provide superior illumination of the subject with their bright compact fluorescent bulbs located to the side and top of the lens. The enclosed spring-balance arms reduce the chance of pinched fingers from springs, providing a sleek clean look too. Arms can be adjusted and secured in any position. Arms extend to 47". UL listed.

Part No.	Description	Price
217517EF	Adjustable Magnifying Lamp	\$79.95
217509EF	3X Magnifying Lamp	\$69.95

## Avoid costly downtime.

This compact, handheld Data-Vac electric duster is far less expensive and better for the environment than canned air. It quickly and easily blows dust, lint and debris off keyboards, computers, printers, disk drives, fax machines, photographic and other high-tech equipment. That helps prevent costly downtime and computer repair.

- 1.73 amps/0.5HP motor
- 25 CFM/10,000FPM
- 12' UL approved power cord
- Attachments: air pin pointer & power air maximizer

Part No.	Description	Weight	Price
219192EF	Data-Vac Electric Duster	2.9 lbs.	\$49.95



## Whip inflation now!

Avoid the light-headed sensation you get when blowing up a large air-filled item. If you've ever inflated a guest bed, kiddie-pool, raft or other large item the old-fashioned way, MagicAir is ready to come to your respiratory rescue. Powered by any nearby 12-volt source, this portable unit supplies plenty of air pressure for demanding inflating jobs. Indoors or out, the MagicAir is ideal for boaters, campers, or anyone who wants to give their lungs a well-deserved vacation from inflation.

Part No.	Description	Weight	Price
219205EF	MagicAir Electric Inflator/Deflator	3.94 lbs.	\$49.95



## Heavy Duty Stapler

The AT-765 stapler is a heavy-duty, professional stapler. Built for the most demanding of environments, all-steel construction with hardened steel working parts. Perfect for contractors, home do-it-yourselfers, and specialty trade applications. Uses arrow T50® staples.

- Nickel Finish
- Handle locking
- Adjustable high impact tension knob
- Comfortable rubber grip
- Visual reload window and rear loading
- Handles 5/16"; 3/8", 1/2", and 9/16" staples
- Weight: 2.1 lbs.

Part No.	Description	Price
227969EF	Gun Stapler	\$19.95



### Arrow Brand T50® Staples

Part No.	Description	Price
230295EF	5/16" staples (1250 per pack)	\$2.45
230308EF	3/8" staples (1250 per pack)	\$2.75
230316EF	1/2" staples (1250 per pack)	\$2.89
230324EF	9/16" staples (1250 per pack)	\$3.15



## Cordless, portable power tools for your weekend projects!

Take your shop with you wherever you work! This tough and economical set of cordless rechargeable tools puts home-improvement power in your hands in a hurry. The kit comes with two interchangeable 14.4V batteries and a quick charger so you never run out of power. Everything is contained in one convenient case so you won't forget one of your essential tools.

### Specifications:

- Drill/driver—Variable speed reversing with a 3/8" keyless chuck, a 16 position

clutch, metal gears, and bronze bushings.

- Detail sander—Triangle shaped for sanding in small and difficult to reach places. Counter-balanced drive shaft with ball bearing support.
- Jigsaw—Adjustable base plate, 0.5" stroke, and 1750 SPM operation
- Flashlight—Has adjustable head so you can direct the beam where you really need it.

Part No.	Description	Price
235504EF	14.4 V Tool Kit	\$99.95

## EZ DIGITAL

### 20MHz 2-Channel Oscilloscope



**Blue CRT for higher resolution!**

**SALE**



- 6" rectangular high-resolution blue CRT with internal graticule & scale
- Vertical deflection: 5mV/div to 5V/div in 10 calibrated steps
- Horizontal deflection: 0.2μs/div to 0.2s/div in 19 calibrated steps, 1-2-5 sequence
- Max. signal input voltage: 250V (DC and peak AC)
- ADD function measures sum of two signals
- Input voltage: 98-125VAC @ 1A, 198-225VAC @ 0.5A, 50-60Hz, 45W

**Includes:** Two X1/X10 40MHz probes, power cord, manual, and block diagram

Part No.	Prod. No.	Description	Was	1	5
136098EF	OS5020	20MHz scope	\$429.95	\$399.95	\$385.95

## EZ DIGITAL

### 20MHz 2-Channel Oscilloscope with 1MHz Function Generator

- Basic specs same as 136098EF (above)
- **7 function generator**
- Frequency range: sine, triangle, square, TTL pulse
- Output impedance: 50Ω
- Output voltage: 14Vp-p



**2 Instruments in 1**

Part No.	Product No.	Description	1	10
94650EF	OS5020G	Func. gen.	\$529.95	\$499.95

### Handheld 20MHz Digital Oscilloscope & Multimeter

- 4-in-1 test equipment: digital oscilloscope, DMM, frequency counter and logic analyzer
- **Oscilloscope:** 2-channel input, 5mV-2V/div; DC-20MHz(-3dB); 50ns - 0.5μs/div; 20 MS/s sampling rate
- **Logic analyzer:** 8 inputs; 1.4V threshold level; 35VDC max. input; 50ns min. pulse width
- **Digital multimeter:** 3999 counts; 40 segment analog bargraph; AC/DC voltage from 400mV-600V; AC current from 40μA-400mA; DC current from 400μA-400mA; resistance from 400Ω-40MΩ; continuity & diode testing
- **Frequency counter:** 5Hz-20MHz; 5 digit max.; AC/DC/DC input coupling; 35Vrms/42V-P/60VDC max. input
- Probes use P/N 22891EF/216047EF/140687EF, pg 65

**Includes:** Manual, 5VDC @ 3A power supply, power cord, DMM test leads, holster and case

Part No.	Description	1	5
162430EF	20MHz digital scope	\$799.95	\$749.95
162974EF	Logic probe	59.95	53.95
163141EF	Rechargeable batt. (portable use)	45.95	41.49
162966EF	RS-232 cable and software	26.95	24.25



(Shown w/ logic probe P/N 162974EF - not included)

### 100MHz 2-Channel Oscilloscope

- 2-channel dual trace
- Delay line
- Auto focusing according to the change of intensity

## EZ DIGITAL



Part No.	Product No.	1	5
121179EF	OS5100	\$999.95	\$949.95

### 2-Channel, 1.5GHz Frequency Counter

- Frequency, period, totalize, RPM
- Gate time: 0.01s, 0.1s, 1s, 10s
- 9-digit green LED display
- Input power: AC 110V/220V ±10%, 50-60Hz

**Includes:** Fuse, manual and BNC cable

Channel	Frequency Range	Resolution
A	0.1Hz-150MHz	0.1nHz-10kHz
B	50MHz-1.5GHz	0.1Hz-100kHz

Part No.	Product No.	1	5
55790EF	FC7150	\$299.95	\$259.95



## FLUKE

### Scopemeter® 123

- Dual input 20MHz digital oscilloscope
- Two 5,000 count True RMS digital multimeters
- Dual-channel TrendPlot paperless recorder
- Connect-and-View trigger simplicity for hands-off operation
- Three-year warranty
- CAT III 600V



Part No.	Model No.	Price
160661EF	Fluke 123/003S	\$1,195.00

### METEX® 4-in-1 Universal System

**With Function Generator, Universal Counter, DC Power Supply & Digital Multimeter**

- Generate 7 forms of waves in 7 frequency ranges from 0.2Hz to 2MHz
- Measure frequency ranges from 5Hz to 1.3GHz
- Generate 5V @ 2A, 15V @ 1A fixed and 0 to 30V @ 0 to 2A variable
- Ranges: DC voltage (400mV to 100V), AC voltage (400mV to 750V), DC/AC current (40mA to 20A), resistance (400Ω to 40MΩ), capacitance (4nF to 400μF) and forward resistance of a semiconductor junction in kΩ
- Size: 14.5"W x 14.0"D x 7.0"H • Weight: 37 lbs.

**Includes:** Manual, cables and software

Part No.	Product No.	1	5
160864EF	MS9150	\$549.95	\$499.95



**Save bench space & \$800!**

Visit [www.Jameco.com/DMM](http://www.Jameco.com/DMM)

For our complete selection of Digital Multimeters.



### 2MHz Function Generator and 2.7GHz Frequency Counter

**Function Generator: (2Hz - 2MHz)**

- Wave forms: sine, square, triangle, skewed, ramp, pulse & TTL level square
- Frequency: 2Hz to 2MHz in 7 ranges
- Output impedance: 50Ω ±10%
- Output amplitude: 2 to 20Vpp at open load; 1 to 10Vpp at 50Ω load
- Offset variable range (max.): ±10VDC at open load
- Frequency sweep time: 20ms to 2s

**Frequency Counter: (5Hz - 2.7GHz)**

- Measuring range: channel A: 1Hz to 20MHz; channel B: 20MHz to 2.7GHz
- Input sensitivity: channel A: 20mVRMS sine wave or 100mVp-p; channel B: 40mVRMS for 20MHz to 1.3GHz; 70mVRMS for 1.3GHz to 2.7GHz
- Max. input voltage: channel A: 35Vp-p; channel B: 3Vp-p
- Input impedance: channel A, 1MΩ; channel B, 50Ω
- Data logging and graphic software

**Includes:** Coax & power cable, manual, serial cable and software

Part No.	Description	Was	1	5
192671EF	Function generator/counter	\$325.95	\$319.95	\$303.95



**SALE**

### 17MHz Logic Probe

- Max input frequency: 17MHz
- Minimum pulse width: 30ns
- Input impedance: 1MΩ
- Pulse flash time: 500ms
- Audible tones for high and low
- Power supply protection: ±20V
- TTL threshold: (Lo) 0.8V ±0.2V, (Hi) 2.3V ±0.2V
- CMOS threshold: (Lo) 30% VCC, (Hi) 70% VCC



**SALE**

Part No.	Description	1	10	25
149930EF	Logic probe	\$32.95	\$29.95	\$26.99

### 150kHz Sine/Square-Wave Audio Generator

Small and convenient, this audio generator can be used to test telco and audio equipment.

- 20Hz to 150kHz in 46 steps
- Low distortion R-C oscillator
- Variable output control
- Size: 5.9"L x 3.2"W x 0.8"H
- Output Impedance: 600Ω

**Includes:** 9VDC battery

Part No.	Prod.No.	Description	1	10
166334EF	BK3001	Audio generator...	\$78.95	\$75.99



### 2MHz Function Generator

- Frequency range: 0.02Hz to 2MHz
- Waveforms: sine, triangle, square, ramp, TTL pulse, skewed sine
- Variable waveform/duty cycle symmetry
- DC offset voltage from 0 to ±10V; can be superimposed to output waveform
- Output volt.: 20Vp-p (open circuit), 10Vp-p (into 50Ω)
- Input voltage: 110V/220V 50-60Hz

**Includes:** Power cord, BNC to clip cable, fuse & manual

Part No.	Product No.	1	5	10
66069EF	FG8002	\$189.95	\$179.95	\$169.95





**250-Watt Analog Power Supply****50VDC @ 5A**

- Adjustable voltage/current outputs
- Constant voltage and current operation
- Color-coded adjustment knobs for voltage, current, and fine tuning
- Color-coded terminals for ground, positive, negative
- 5A @ 250V fuse • Isolated ground
- Input voltage: 110VAC @ 50-60Hz
- Color: dark gray
- Size: 4.9"L x 7.7"W x 6.7"H • Weight: 13.8 lbs.



Part No.	Mfr. Cross Ref. No.	1	10	25
175249EF	DPS5050	\$189.95	\$179.95	\$171.49

**225-Watt Analog Power Supply****15VDC @ 15A**

- Output voltage: 9VDC to 15VDC
- Output current: 25A max. (22A continuous @ 13.8VDC)
- Constant voltage operation
- Over-voltage protection @ 16.5V
- Short-circuit protection @ 27.5A
- Color-coded adjustment knob and output terminals for voltage • Built-in fan
- Cigarette lighter plug for current output
- Power and fan LED indicator • Weight: 3.8 lbs.
- Voltage and current panel meter
- Input voltage: 110VAC/220VAC @ 47-63Hz (switchable) • Size: 5.6"L x 6.2"W x 4.0"H



Part No.	Mfr. Cross Ref. No.	1	10	25
175257EF	SPS250A	\$169.95	\$152.95	\$144.95

**Logic Pulser**

- Compatible with TTL, DTL and CMOS ICs
- 1MΩ sync input impedance
- "One shot" or continuous 5Hz train pulse
- Pulse repetition rate: 0.5pps/400pps
- Pulse width output at 100mA load: 10µs
- Pulse mode output current: 10mA
- Square wave current output: 5mA
- Size: 7.8"L x 1.0"W x 0.6"H



Part No.	Description	1	10	25
24601EF	Logic pulser	\$19.95	\$17.95	\$15.95

**190-Watt Triple Output Power Supply****Digital Display**

- Output voltage: 0 to +30VDC @ 3A  
0 to -30VDC @ 3A  
+5VDC @ 2A
- Ripple voltage: less than 3mVp-p
- Volt and current meter: LED display (±1% + 1 digit) • Overload protection circuit
- Input volt.: 100VAC-230VAC @ 50-60Hz (switchable)
- Includes: Manual and spare fuse



Part No.	Product No.	1	5
157518EF	GP4303TP	\$549.95	\$529.95

**150-Watt Analog Power Supply****50VDC @ 3A**

- Adjustable voltage/current outputs
- Constant voltage & current operation
- Color-coded terminals for ground, positive and negative terminals
- 3A @ 115V fuse
- Color-coded adjustment knobs for voltage, current and fine adjustment
- Input voltage: 110VAC @ 60Hz
- Size: 9.0"L x 4.75"W x 7.5"H • Weight: 12.3 lbs.



Part No.	Description	1	10	25
163723EF	50VDC @ 3A	\$159.95	\$144.95	\$137.95

**150-Watt Linear Power Supply****15VDC @ 10A**

- Output voltage: 2VDC to 15VDC
- Output current: 15A max.
- Constant voltage operation
- Color-coded terminals for positive and negative terminals, voltage adjustment knob
- Overvoltage, overcurrent, short-circuit protection
- Cigarette lighter output current plug
- LED indicator for power and warning
- Current and voltage panel meter
- Built-in fan • Input voltage: 110VAC @ 60Hz
- Size: 5.7"L x 6.3"W x 4.0"H • Weight: 12.0 lbs.



Part No.	Mfr. Cross Ref. No.	1	10	25
175265EF	DPS150A	\$149.95	\$134.95	\$129.95

**150-Watt Digital Power Supply****30VDC @ 5A**

- Adjustable voltage/current outputs
- Constant voltage and current operation
- LCD displays for both current and voltage
- Coarse and fine adjustment knobs for current and voltage
- Color-coded terminals for positive, negative and ground connections
- 2A @ 250V fuse • Dual digital display
- Input voltage: 110/220VAC @ 50-60Hz (switchable)



Part No.	Description	1	10	25
153242EF	30VDC @ 5A	\$234.95	\$211.49	\$190.35

**100-Watt Digital DC Power Supply****30VDC @ 3A**

- Triple output with fixed 5VDC @ 0.5A, 12VDC @ 0.5A
- Adjustable 0 – 30V voltage and 0 – 3A current outputs
- Displays of both voltage and current
- Constant voltage
- Current limiting indicator
- Overload and short circuit protection
- Binding post terminals for variable supply
- Input voltage: 110/220VAC @ 50-60Hz (switchable)
- Size: 9.5"L x 6.0"W x 5.6"H • Weight: 10 lbs.



Part No.	Description	1	10
197991EF	Digital DC	\$198.95	\$178.95

**150-Watt Benchtop Power Supply****Single Output**

- Power: 150W
- 30VDC @ 5A
- Display: 2-Analog
- Voltage and current adjustable
- Current restricted and short-circuit protection
- Input voltage: 110/220 ±10% VAC
- Analog display accuracy: 2.5%
- Size: 5.4"W x 6.2"H x 11.5"D



Part No.	Description	1	10
207618EF	Digital DC	\$159.95	\$144.95

**DMMs****C550 Tool Bag**

- Steel reinforced frame
- Rugged ballistic cloth with heavy duty hardware
- Large zippered storage compartment with 25 pockets



Part No.	Model No.	Price
214383EF	25-pocket tool bag	\$60.00

**Digital Multimeter Quick Selection Guide**

See page 63

**Fluke 175/179 6000-Count Digital Multimeters****SALE**

- Min./max./average functions
- Auto hold and manual hold
- IEC 1010 rating Cat IV 600V/ Cat III 1000V
- Resolution: 100µV maximum
- DC/AC voltage ranges: 600mV – 1000V
- DC/AC current ranges: 60mA – 10A
- Resistance ranges: 600Ω – 50MΩ
- Also capacitance and frequency
- Size: 6.3"L x 3.3"W x 9.2"H
- Weight: 1.5 lbs.



Part No.	Model No.	DC Accuracy	1	5
192655EF	Fluke 175	0.15%	\$168.95	\$159.95
185535EF	Fluke 179	0.09%	\$213.95	\$198.49

**WAVETEK® Mettman® VT201 Non-Contact Voltage Detector**

- Both visible and audible voltage indicators
- 70-440VAC range
- Detects AC voltages with no electrical contact



Part No.	Description	Price
214447EF	Non-contact voltage detector	\$9.95

**Order Anytime 24 x 7 x 365****www.Jameco.com**

Phone: 1-800-455-6119 Fax: 1-800-237-6948

## Digital Multimeter Quick Selection Guide

All have VDC, VAC, Resistance and Current

\* See indicated page for more details on each product

Handheld Digital Multimeters												
Manufacturer No. Best Sellers Part No.	Features	Display Count * Page	Standard Functions	Special Functions	Transistor hFE Test	Continuity Test	Logic Test	Temperature	Frequency	Inductance	Capacitance	Price
220812EF	Mastech M300	Below	2000									\$12.95
27115EF	Metex M3800	Below	2000									39.95
119212EF	JE110	Below	2000									19.95
192647EF	Wavetek 10XL	Below	2000									49.90
220759EF	Mastech MAS30L	Right	2000									15.95
177480EF	AECE2890	Below	2000									49.95
147096EF	BelMerit DX460L	Below	2000									99.95
211650EF	Exttech MN26	64	4000									39.95
137461EF	Metex M3860D	64	4000									149.95
192655EF	Fluke 175	62	6000									168.95
185535EF	Fluke 179	62	6000									208.95
136590EF	Mastech MY65	64	20,000									69.95
185201EF	B&K BK5380	64	50,000									149.99
182043EF	Fluke 189	Below	50,000									398.95
Bench-Type Digital Multimeters												
132564EF	DM441	64	20,000									219.95
166852EF	Metex MXD4660A	64	20,000									249.95

## A great bargain 2000-count multimeter for just \$15.95.

A full-featured multimeter with the basic functions needed for testing electronic equipment. Large 0.6" 2000-count LCD backlight display and single rotary action switch for selection function and range.

Compared to simpler models this DMM features:

- Greater resolution: 100uV maximum
- 7 function / 17 ranges
- Data hold switch, backlight button
- Transistor hFE test
- DC voltage ranges: 200mV – 600V
- AC voltage ranges: 200V – 600V
- DC current ranges: 200uA – 10A
- Resistance ranges: 200Ω – 2MΩ
- Size: 5.4"H x 2.7"W x 1.2"D



GREAT Buy!

Part No.	Description	1	10
220759EF	Meter w/ Diode & hFE Test	\$15.95	\$15.15

## Fluke 189 50,000-Count Multimeter w/ Data Logging

- Digital and analog bar graph display
- Backlight with 2 brightness levels
- Fast auto range • AC/DC true RMS
- Resolution: 1μV maximum
- DC/AC voltage ranges: 50mV – 1000V
- DC/AC current ranges: 500μA – 10A
- Also capacitance, frequency and temperature
- Conductance, diode testing and continuity function capable
- Data logging: 288 intervals stored; 100 readings • Weight: 2.0 lbs.
- Size: 8.0"L x 3.9"W x 2.0" Thick



FLUKE

Part No.	Model No.	Resis. Ranges	1	5
182043EF	Fluke 189	500Ω-30MΩ ....	\$398.95	\$378.95

## 2000-Count Multimeter

With Temperature & Frequency Measurement

- 3½-digit LCD (1.0" digit height)
- Resolution: 100μV maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 200mV – 700V
- DC/AC current ranges: 200μA – 10A
- Resistance ranges: 200Ω – 200MΩ
- Capacitance ranges: 2nF – 20μF
- Frequency: 20kHz • Wt.: 1.6 lbs.
- Temperature range: -20°C – 1000°C
- Diode, transistor and continuity testing
- Data hold switch • Size: 4.0"W x 2.0"D x 8.0"H



Includes: Manual, probes, and 9V battery

Part No.	Mfr. Cross Ref. No.	1	10
177480EF	AECE2890	\$49.95	\$44.95

## 2000-Count Pocket Multimeter

- DC voltage ranges: 200mV, 2V, 20V, 200V, 1000V
- AC voltage ranges: 200V, 750V
- DC current ranges: 200μA, 2mA, 20mA, 200mA, 10A
- Resistance ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ
- Diode and transistor tests
- 0.5" digit height • Removable test leads
- Size: 2.6"W x 1.0"D x 4.8"H

Includes: 9V battery



Part No.	Description	1	10	50
119212EF	Pocket multimeter ....	\$19.95	\$17.95	\$16.19

## BelMERIT 2000-Count Multimeter

- DC voltage ranges: 200mV – 1000V
- Function and range annunciators
- DC/AC current ranges: 200μA – 10A
- Diode and continuity test
- Frequency ranges: 2kHz – 20MHz
- Z<sub>IN</sub> = 10MΩ
- AC voltage ranges: 200mV – 750V
- Data hold
- Resistance ranges: 200Ω – 20MΩ
- Inductance: 20mH – 20H
- Capacitance: 2nF – 2000μF • Auto power off
- Size: 4.0"W x 1.5"D x 8.0"H



Includes: Manual, test probes and 9V battery

Part No.	Description	1	10
147096EF	2000-count multimeter .....	\$99.95	\$89.95

## 2000 Count 7-Function Multimeter

- 7 function/22 ranges & 6 range volt tester
- Large 17mm (.67") display
- DC voltage ranges: 200mV – 1000V
- DC current ranges: 200μA – 10A
- Safety tester: 6, 12, 24, 50, 110 and 220 volts

- Unique voltage Safety Tester™
- Resolution: 0.1mV maximum
- AC voltage ranges: 200V – 750V
- Resistance ranges: 200Ω – 20MΩ
- Diode test and continuity beeper



Part No.	Model No.	1	10	25
192647EF	10XL	\$49.90	\$47.45	\$44.95

## METEX® 2000-Count Multimeter

0.5" Digit Height • LCD Readout

- Resolution: 100μV maximum
- DC voltage ranges: 200mV – 100V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 20μA – 20A
- Resistance ranges: 200Ω – 20MΩ
- Auto zeroing
- Input impedance: 10MΩ
- Overload protection: 1000VDC/750VAC



Includes: Probes, carrying case, manual & 9V battery

Part No.	Product No.	1	10	50
27115EF	M3800	\$39.95	\$35.95	\$32.49

## Mastech 2000-Count Auto-Range Pocket Multimeter

The unique design of this full-function pocket DMM allows you to change the function with your thumb while holding it in one hand. Built-in leads. 500V overload protection.

- 3½-digit LCD display (0.43" digit height)
- Resolution: 100μV maximum
- DC voltage ranges: 2V – 500V
- AC voltage ranges: 200V – 500V
- DC current ranges: 200mA
- Resistance ranges: 2kΩ – 2000kΩ
- Diode and continuity test
- Size: 4.7"H x 2.7"W x 0.8"D



Full Function Pocket DMM

Part No.	Product No.	1	10	25
220812EF	M300	\$12.95	\$12.29	\$11.69

[www.Jameco.com/DMM](http://www.Jameco.com/DMM)

See our website for Jameco's complete selection of Digital Multimeters!





### Our Lowest Priced 20,000-Count Multimeter

- Extra-large digits (0.8" digit height)
- Resolution: 10 $\mu$ V maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 2V – 700V
- DC/AC current ranges: 2mA – 10mA
- Resistance ranges: 200 $\Omega$  – 200M $\Omega$
- Capacitance ranges: 200pF – 20 $\mu$ F
- Measures transistor  $h_{FE}$  & continuity
- Hold button • Auto power off



Includes: Boot, 9V battery, probes & manual

Part No.	Product No.	1	10	25
136590EF	MY65	\$69.95	\$62.95	\$56.95

### 4000-Count, 11-Function Multimeter with Autorange

- 4000-count large LCD display
- Auto ranging with manual override
- Resolution: 0.1mV max.
- AC/DC voltage ranges: 400mV – 600V
- AC/DC current ranges: 400 $\mu$ A – 10A
- Resistance ranges: 400 $\Omega$  – 40M $\Omega$
- Capacitance ranges: 4nF – 200 $\mu$ F
- Frequency ranges: 10Hz – 10MHz
- Temperature ranges: 0°F – 1400°F (0°C – 760°C)
- Diode test, duty cycle and continuity
- Relative zero, data hold, range hold, auto off
- Size: 2.4"W x 1.6"D x 4.8"H • Weight: 0.6 lbs.



Includes: Protective holster with stand, two 1.5V AAA batteries and test leads

Part No.	Description	1	10
211650EF	Multimeter	\$39.95	\$37.95

### 4000-Count Multimeter with RS-232, Dual Display & Inductance

- Dual displays for comparative measurements
- 3 1/4-digit LCD (0.5" digit height)
- True RMS
- Resolution: 100 $\mu$ V maximum
- DC voltage ranges: 400mV – 1000V
- AC voltage ranges: 400mV – 750V
- DC/AC current ranges: 400 $\mu$ A – 20A
- Resistance ranges: 400 $\Omega$  – 40M $\Omega$
- Temp.: -40°C to +1200°C; 1°C res.
- Measures inductance, capacitance, transistor  $h_{FE}$  and frequency
- Autoranging all measurement settings



METEX

Includes: 9V battery, software and cable

Part No.	Product No.	1	10
137461EF	M3860D	\$149.95	\$134.99

### 50,000-Count Digital Multimeter with Analog Bar Graph

- True RMS reading • 0.55" digit height
- Auto and manual ranging
- AC/DC voltage protection
- Continuity and diode testing
- Basic DC accuracy: BK5380 – 0.025%
- DC voltage: 500mV to 1000V (10 $\mu$ V to 100mV resolution)
- Resistance: 500 $\Omega$ –50M $\Omega$  (10m $\Omega$ –1k $\Omega$ )
- Capacitance: 50nF – 50mF (10pF – 10 $\mu$ F res.)
- Frequency: 0.6Hz – 500kHz



BK PRECISION

Includes: Probes and manual

Part No.	Product No.	1	10	25
185201EF	BK5380	\$149.99	\$127.49	\$95.65

### 20,000-Count Benchtop Multimeter w/ RS-232, Analog Bar & 4 Displays

- Automatic polarity indicator
- 1-2 readings per second
- DC accuracy: 0.1% +5 digits
- 10 reading storage & compare
- Resolution: 10 $\mu$ V maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 2mA – 20A
- Resistance ranges: 200 $\Omega$  – 20M $\Omega$
- Frequency ranges: 20kHz – 20MHz
- MIN., MAX., AVE., relative functions
- Logic, diode, transistor  $h_{FE}$  and continuity test



METEX

Includes: Manual, power cable, probes and software

Part No.	Product No.	1	10
166852EF	MXD4660A	\$249.95	\$224.95

### Passive Component LCR Meter

- Measures L, C, and R with secondary parameter Q, D or R; both are displayed
- Accuracy of 0.7% for L & C, 0.5% for R
- Inductance ranges: 2000.0 $\mu$ H to 2000.0H
- Capacitance ranges: 2000.0pF to 2000.0 $\mu$ F
- Resistance ranges: 20.000 $\Omega$  to 20.000M $\Omega$
- Test frequencies of 120Hz and 1kHz
- Quality (Q) reading: 0 to 9999
- Dissipation Factor (D) (with C) reading: 0 to 0.9999
- Selectable parallel or series equivalent circuit
- Set HI/LO limits, absolute or percentage
- Bidirectional RS-232 port with optional software
- Max./Min./Avg. recording with auto power off



Includes: Leads, alligator clips, 9V battery & holster

Part No.	Description	1	10
198678EF	LCR Meter	\$178.95	\$160.95

### 2000-Count Digital LCR Meter

- Inductance ranges: 200 $\mu$ H to 200H
- Capacitance ranges: 200pF to 2000 $\mu$ F
- Resistance ranges: 2m $\Omega$  to 20M $\Omega$
- Dissipation factor measurement
- Size: 6.7"L x 3.3"W x 1.4"D
- One-year warranty



Includes: Test leads and 9V battery

Part No.	Description	1	10	25
127538EF	LCR meter	\$139.95	\$125.95	\$118.95

### Mini DC/AC Current Clamp Meter/Multimeter

- Bright 1/2" LCD display with DATA HOLD
- 0.5" digit height
- Size: 7.1"L x 1.9"W x 1.4"H



Requires: 9V battery not included (P/N 151095EF, pg 95)

Includes: Test leads, manual and case

Part No.	Description	1	10
115756EF	Mini DC/AC clamp meter	\$119.95	\$107.95

ACA*	20A, 200A	+1.2% + 5d
DCA	200A	+1.2% + 5d
ACV*	500V	+1.0% + 2d
DCV	200V	+0.8% + 1d
Resistance	200 $\Omega$	+1.2% + 1d
*Freq. Response	40-400Hz	
Zero Adjust	External knob for DCA	

### 20,000-Count Benchtop Digital Multimeter

- 4 1/2-digit display, 5-digit green LCD
- DC accuracy: 0.05%
- Full overload protection
- Resolution: 100 $\mu$ V max.
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 2mA – 10A
- Resistance ranges: 200 $\Omega$  – 20M $\Omega$
- Frequency measurement up to 200kHz
- Continuity check w/ beeper
- True RMS in AC range
- Data hold, diode check, transistor  $h_{FE}$  measurement



True RMS

Part No.	Product No.	1	10	25
132564EF	DM441	\$219.95	\$209.95	\$199.95

### Digital Light Meter

- Lux and footcandle
- Range: 0 - 50,000 Lux 0 - 5,000 Fc
- Analog output connections
- Separate light sensor for optimum location sampling
- Dimensions (sensor probe): 3.2"L x 2.2"W x 0.5"H



Part No.	Description	1	10
131764EF	Digital light meter	\$99.95	\$89.95

### Heavy Duty pH/mV Temperature Meter

- Dual display for pH or mV and temp.
- Degrees C/F switchable
- Easy 2-point slope and cal adjustments at pH4 and pH7
- Min./max., and average recall
- Super-large LCD w/contrast adjust
- Manual and auto temperature compensation using temperature probe
- Auto shutoff and data hold
- Low battery indicator
- Size: 7.0"L x 2.9"W x 1.3"T • Weight: 0.8 lbs.



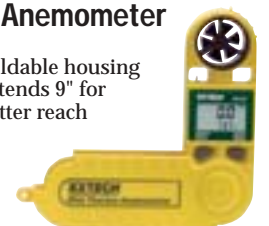
Includes: Temp. probe, pH probe and carrying case

Part No.	Description	1	5
223861EF	Heavy duty temp. meter	\$268.95	\$255.49
218131EF	Tripak buffers for calibration	24.95	23.69
218149EF	Vinyl carrying case	9.95	9.49

### Mini Thermo-Anemometer



Foldable housing extends 9" for better reach



Waterproof, pocket size with air velocity, temperature and windchill, all in one. Ideal for checking blowers, fans, exhaust hoods and balancing AC/HT ducts.

- Measures temperature and windchill from 0°F to 122°F (-18°C to 50°C)
- Measures wind speed in ft/min. MPH, m/s, km/h, knots and Beaufort force
- Large dual display for air velocity and temperature
- Auto shut-off 20 minutes after last key is pressed
- Water resistant housing floats and drop tested to 6'

Includes: CR2032 lithium battery and lanyard

Part No.	Description	1	5
218085EF	Mini thermo-anemometer	\$88.95	\$84.49



## Electromagnetic Radiation Meter

Electromagnetic radiation is all around us, some of it not so friendly; but until now there's never been an easier, more portable device to detect and measure it. Whether you're concerned about your kid's playground near the power station, the laboratory, microwave oven emissions, or searching for clandestine surveillance devices; the ZAP Checker can give you a new measure of peace of mind. Its portability and multiple settings allow you to search out EMR whenever and wherever you want, from your home or office environments to hotel suites and conference rooms.

Part No.	Description	Range	1	10
217808EF	ZAP Checker	10MHz to 4.5GHz .....	\$129.95	\$114.95



## Pomona® Stackable Banana Test Lead Cables



- 5000V @ 15A • 55°C max.
- 159919EF: Two 36" leads, mini clip w/ banana
- 45VAC @ 5A max.; beryllium copper contact and glass filled insulation
- 159901EF: Two 24" leads 159919EF: Two 36" leads

Part No.	Prod. No.	Description	1	10	25
159898EF	3782-36	Mini w/ banana	\$7.95	\$7.19	\$6.59
159901EF	B-24-02	Patch cord .....	9.95	8.95	7.95
159919EF	B-36-02	Patch cord .....	9.95	8.95	7.95

## Banana to Banana Test Leads

- Stackable
- Color coded; 2 each red, yellow, blue, black, white • 9.8" long
- 10 per package • 18 AWG wire

Part No.	Description	1	10	25
77841EF	Test leads .....	\$22.95	\$20.69	\$18.59

## BNC to Alligator Clip Test Cable

Permits BNC assembly to be used as a test cable.

- Upper connection: two alligator clips – red 5.5" 22AWG wire; black 9" 22AWG wire
- Lower connection: 23" RG/58U cable w/ BNC connector

Part No.	Description	1	10	100	1000
11383EF	BNC cable .....	\$3.49	\$2.49	\$2.25	\$2.05

## Double Banana Plugs

- Dual gold-plated female banana plugs • Stackable 125217EF

Part No.	Description	1	10	100
125209EF	Blk banana connector ...	\$2.65	\$2.39	\$2.15
125217EF	Red banana connector ...	2.39	2.15	1.95

## Modular Oscilloscope Probes

- 60MHz, 100MHz, 250MHz
- 216047EF/140687EF: with IC test ground cover and spring ground contact
- Maximum input voltage: 600V
- Length: 5'
- Hook and pointed probes
- Alligator clip ground wire
- BNC male connector

Part No.	Mfr. Cross Ref. No.	Bandwidth (±3dB)		Impedance (R/C) *		Pricing		
		Attenuation		Attenuation				
		x1	x10	x1	x10	1	10	50
22891EF	LF101E	6MHz	60MHz	1MΩ/180pF	10MΩ/22pF	\$22.95	\$20.79	\$18.69
216047EF	HF-9100	6MHz	100MHz	1MΩ/47pF	10MΩ/16pF	34.95	29.95	26.95
140687EF	LF290	6MHz	250MHz	1MΩ/150pF	10MΩ/14pF	45.95	41.39	37.25

\* with oscilloscope input 20pF

## 1 1/16" Banana Plugs

- Set-screw connection
- Standard banana spring plug
- Additional 6-32 threaded hole for connection reliability
- .1875" lead opening
- Insulating sleeve is threaded to banana plug body
- Size: 1.6"L x 0.4"Dia.

Includes: One red and one black plug

Part No.	Description	1	10	100	1000
72194EF	Banana plugs .....	\$1.59	\$1.49	\$1.25	\$1.09

## Mini Test Clips

- Two lengths
- One black and one red hooked probe clip

Part No.	Description	1	10	100
114809EF	1.75" mini test clips ...	\$1.89	\$1.49	\$1.35

## Mini-Clip Test Leads

These spring loaded mini-clips hook easily to IC pins for testing.

- Set of five: red, blue, green, black and yellow
- 14"L; clips on both ends
- 26 AWG to 300V CSA/UL approved wire

Part No.	Description	1	10	100	1000
135298EF	Mini test leads ....	\$11.49	\$10.39	\$9.29	\$8.39

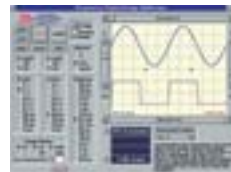
## BNC to Clip Test Cable

BNC connectors are designed for signal frequencies into the gigahertz range, making them ideal for communications, video and test equipment.

- Mini-clip • Length: 39"

Part No.	Description	1	10	50	100
11463EF	Mini-clip RG174.....	\$4.39	\$3.99	\$3.59	\$3.19

## PC-MultiScope 100MHz Dual-Channel DSO



Turn your PC into a digital storage oscilloscope for 1/2 the cost of a DSO!



### mission technology

- 100MHz sampling; dual channel
- Chart recorder and FFT mode
- 5mV to 5V per div.; 20MHz bandwidth; ext. trigger
- 0-4MHz sine and square wave signal generator
- Triple power supply; 5VDC @ 500mA and ±0-8VDC @ 250mA • One-year warranty

Includes: Parallel port cable, AC adapter, alligator clip probe, Windows® 3.1/95/98 software

Part No.	Description	1	10
163230EF	PC-MultiScope 3 .....	\$579.95	\$529.95

## Handheld Oscilloscope and Multimeter

Six Units in One!

**SALE**

- 4,000 count True RMS DMM
- 1MHz bandwidth oscilloscope
- 20MHz sampling rate
- Logic test • Frequency counter
- Trend mode allows recording of sine waves for a period of time
- Component test
- Three-year warranty

Includes: AC charger, test leads and manual

Part No.	Description	1	5
160805EF	440 digital oscilloscope <del>\$349.95</del>	\$309.95	\$295.95
168330EF	RS-232 software and cable.....	69.95	62.95



## Digital Handheld Oscilloscope

- 5MHz for repetitive signals; 0.5MHz for single shot events
- Input impedance: 1MΩ/20pF
- Maximum input voltage: 100V peak (AC + DC)
- Input coupling: DC, AC, and GND (GND for auto zero reference)
- LCD graphics display: 64 x 128 pixels (64 x 96 pixels for signal)
- High contrast LCD display with 3.3" viewing angle
- Vertical resolution: 8-bit (6-bit for LCD)
- Timebase range: 2µs to 20s/div
- Input sensitivity: 5mV to 20V/div • Screen hold
- Trigger mode: run, normal, once, and ± slope
- True RMS and dB measurements • Linearity: ±1 bit
- Recommend 9VDC @ 300mA power supply (P/N 133891EF, pg 37)
- Batteries not included, recommend 5 each (P/N 32627EF, pg 47) or (P/N 151087EF, see website)

Includes: Insulated BNC to alligator clip measurement probes and case

Part No.	Description	1	5
168823EF	5MHz scope (Model HPS5) <del>\$199.95</del>	\$168.95	\$158.95



33 More @ [www.Jameco.com](http://www.Jameco.com)

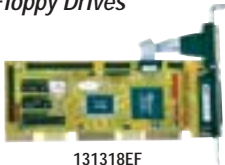
See our website for other Test Leads and Binding Posts.

**ISA IDE Super 16-Bit I/O Plus****Supports 2 IDE and 2 Floppy Drives**

- Parallel printer port interface(P/N 131318EF is bidirectional)
- Game port
- Two RS-232 serial ports
- UART emulation:  
67061EF: 16450; 131318EF: 16550

**Includes:** Manual and cables

Part No.	Description	1	10
67061EF	16450 UART I/O .....	\$14.95	\$13.49
131318EF	16550 UART I/O .....	29.95	26.95



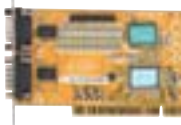
131318EF

**PCI Ultra High-Speed I/O****Serial 16C550 and Parallel Port**

- 32-bit PCI bus with PCI bus 2.1 specification compliant
- Serial ports are software configurable w/ throughputs up to 921.6kbps
- BPP/SPP mode compliant
- Windows® 95/98/NT 4.0 drivers supported

169594EF: 2 serial DB9M on card and 1 parallel DB25F panel bracket assembly

Part No.	Description	1	10
146667EF	Dual serial (16C550) Was <del>\$49.95</del> \$38.95	\$36.95	
169594EF	2 serial (16C550) and 1 parallel ....	59.95	53.95



169594EF

**PCMCIA RS-232 Interface**

PC card/PCMCIA-based serial port card.

- Low cost single port RS-232 interface
- Uses 16550 UART
- 5, 6, 7 or 8 data bits
- Odd, even or no parity
- 115k baud data rates
- Configured as COM1, COM2, COM3 or COM4
- PCMCIA type II compliant

**Includes:** 1' cable

Part No.	Description	1	10
164451EF	PCM-COM232 card .....	\$119.95	\$104.95

**PCI High-Speed Multi-Port Serial I/O****2, 4 or 8 16C650****Serial Ports**

- 32-byte FIFO
- Plug & Play compatible
- Standard RS-232 interface
- Transfer rate: up to 921kb/sec.
- Supports IRQ sharing

172005EF: Dual 16C650 Serial Ports

**Includes:** Manual and drivers on CD-ROM & floppy

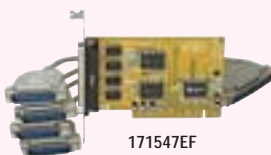
171547EF: Quad 16C650 Serial Ports

**Includes:** Manual, cable (37-pin male to 4 DB25 male) and drivers on CD-ROM

171660EF: Eight 16C650 Serial Ports

**Includes:** Manual, internal cable with bracket, 2 cables (37-pin male to 4 DB25 male) and drivers on CD-ROM**System requirements:** 486 and higher compatible, Windows® 95/98/NT/2000

Part No.	Description	1	10
172005EF	2-port PCI serial .....	\$59.95	\$53.95
171547EF	4-port PCI serial .....	129.95	116.95
171660EF	8-port PCI serial .....	179.95	161.95



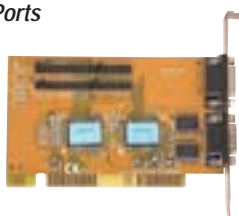
171547EF

**ISA 2-Port High-Speed Serial I/O****Dual 16C650 UART Ports**

- 16-byte FIFO
- Transfer rates up to 921kb/sec.
- IRQ (3, 5, 7, 9, 10, 11, 12, 15) and address jumper configurable
- Weight: 0.5 lbs.
- 2 DB9 male connectors
- Size: 5.0"L x 2.7"W

**System requirements:** 486/586 and higher compatibles; Windows® 95/98/NT/2000**Includes:** Manual and drivers on CD-ROM

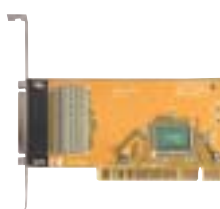
Part No.	Description	1	10
171555EF	Dual serial .....	\$24.95	\$21.85

**PCI Ultra High-Speed Parallel****Single Ultra High-Speed Port**

- Supports ECP and EPP
- 32-byte FIFO
- Transfers data up to 2MB/sec.
- Supports IRQ sharing
- Plug & Play ready
- 1 DB25 female connector
- 32-bit PCI interface
- Size: 4.7"L x 2.2"W
- Weight: 0.5 lbs.

**System requirements:** 486/586 and higher compatibles; Windows® 95/98/NT/2000**Includes:** Manual and drivers on CD-ROM

Part No.	Description	1	10
171926EF	PCI single parallel .....	\$39.95	\$35.95

**PCI Ultra ATA/133 Controller Card**

- Supports 4 IDE devices
- 133Mbytes/sec burst data rate on PCI local bus and IDE bus
- Widest range of compatible IDE/ATAPI devices
- Supports Windows® 98/ME/NT4.0/2000/XP
- Enhanced BIOS on board
- Size: 5.2"L x 2.5"W

**Includes:** 80-wire/40-pin cable, 3.5" drivers & manual

Part No.	Description	1	10
208021EF	Ultra 133 controller card <del>\$49.95</del> \$44.95	\$39.95	



SALE

**ISA Fast SCSI-II Controller**

- Compatible with DOS, Windows®, Windows® NT, Windows® 95, OS2 Network, and SCO Unix
- Internal and external SCSI-II connectors
- Size: 6.3"L x 2.9"W

**Includes:** Setting sheet, ribbon cable, and software (3.5" disk)

Part No.	Description	1	10
149294EF	ISA SCSI-II controller .....	\$44.95	\$39.95

**ISA Controller Card**

- 16-bit data transfer which is fully compatible with IBM PC/AT interface
- Supports two floppy disk drives (360k, 720k, 1.2Mb, 1.44Mb)
- Controls two "AT BUS" hard disk drives
- High bandwidth host interface works up to 16MHz host I/O clock
- Size: 5.5"L x 2.1"W

Part No.	Description	1	10
206316EF	ISA controller card .....	\$19.95	\$17.95

**Serial Port Complete****Lakeview Research**

RS-232 & RS-485 are the most versatile, inexpensive interfaces for linking, but the hardware & programming are often misunderstood. This 306 page book provides you with everything you need to design, program, install and troubleshoot the links you set up.

**Includes:** 3.5" diskette

Part No.	Description	Price
154771EF	Serial Port Complete Book .....	\$39.95

**More Books on Page 94**

See our website for our complete selection  
[www.Jameco.com/Books](http://www.Jameco.com/Books)

**RS-232 to RS-485/422 Bidirectional Converters**

- Cable length: 4000' max.
- Data rate: 1MB/second
- 4-wire full duplex or 2-wire half duplex
- Controlled by RTS signal
- Point-to-point and multidrop operations
- RS-485: terminal block & RJ11 connections
- RS-232: DB25 female connector
- Input: 110VAC

197931EF: port powered • Data rate: 100kbps  
122956EF: features RS-485SI optical isolation: 2000V

**Includes:** 9VDC @ 300mA power adapter

Part No.	Description	1	10
117701EF	RS-232-485/422 .....	\$57.95	\$51.95
197931EF	RS-232-485/422 .....	69.95	62.99
122956EF	RS-232-485/422 OPT ISO .....	119.99	107.99



117701EF

**GPIO IEEE-488.2 Board****PCI Bus**

- 1 MB/s transfer rates
- 1024 word FIFO buffer

Part No.	Mfr. Cross Ref. No.	1	10
177121EF	PCI-GPIB-1M .....	\$398.95	\$358.95

**More @ www.Jameco.com**

See our website for more Industrial Communication Products.



## 2-Port USB-A PCI Card

- Plug & Play compatible
- Uses VIA VT83C572 controller chip
- USB specification V.1.1 compatible
- USB legacy BIOS supports
- Operates in USB-aware operating system (Win® 95, 98)

Includes: Manual

Part No.	Description	1	10	25
155299EF	PCI USB	\$24.99	\$22.49	\$20.25

## 2-Port USB-A PCMCIA Card

- PCMCIA type-II card
- New 32-bit CardBus
- Size: 4.6"L x 2.1"W
- USB 1.1 OHCI USB standard; 12Mbps max. speed

System requirements: Windows® 98, ME, 2000 and Mac OS 8.6 or later

Includes: Manual

Part No.	Description	Was	1	10
189499EF	USB 1.0 CARD BUS card	<del>\$99.95</del>	\$49.95	\$44.95

## USB-A Female Cables & Bracket

- Supports data transfer rates of 12Mbps
- Connection of two devices
- Dual USB-A female connectors • 8" long

Part No.	Description	1	10	25
144813EF	USB-A panel mount	\$6.95	\$6.25	\$5.59

## USB to Serial Adapter with Prolific Chipset

This USB serial adapter provides an external Plug-and-Play RS-232 port for computers, notebooks, and handheld computing devices. Provides high-quality serial connections at transfer rates of more than 500kbps for cell phones, PDAs, digital cameras, modems and ISDN terminal adapters.

- Supports RS-232 serial interface, automatic handshake mode, remote wake-up and power management
- Provides a 96-byte buffer for each upstream and downstream data transfer
- Has a 7" cable with DB25 male connector and a 14" cable with USB-A connector

System requirements: Windows®98/2000, USB host controlled installed in the system

Part No.	Description	1	5
213006EF	USB-A to serial converter	\$29.95	\$27.95

## USB Cables



### USB-A Male to USB-B Male

Part No.	Description	1	10	25
175417EF	3' cable	\$4.49	\$3.99	\$3.59
169359EF	6' cable	4.95	4.49	3.95
169367EF	10' cable	5.95	5.25	4.59

### USB-A Male to USB-A Male

Part No.	Description	1	10	25
175425EF	3' cable	<del>Was \$2.95</del> \$2.95	\$2.65	\$2.39
175433EF	6' cable	4.95	4.49	3.95
175441EF	10' cable	5.95	4.49	3.15

### USB-A Male to USB-A Female Extension

Part No.	Description	1	10	25
199806EF	10' cable	\$5.95	\$4.49	\$3.15

## USB-A to Joystick (DB15) Adapter

- Fully compatible with any 15-pin game port PC game controller
- Mode switch selector for maximum compatibility and flexibility
- USB Plug & Play
- Input connector: USB-A male
- Output connector: DB15-pin female connector
- Size: 3.2"L x 2.3"W x 1.3"H

System requirements: 586 or higher compatible; available USB-A port or Hub; Windows® 98 or higher

Includes: Manual and 3.5" drivers

Part No.	Description	1	10
189510EF	USB to game port adapter	\$39.95	\$35.99

## USB Gender Adapter

### USB-A to USB-B

- USB-A (female) to USB-B (male)

Part No.	Dimensions	1	10	25
169375EF	1.7"L x 0.6"W	\$6.95	\$6.35	\$5.59

## External 7-Port USB Hub

- 7 USB-A female output ports
- USB-B female root port
- Allows you to attach 127 USB devices to your PC
- LED indicators for port, status, and power
- Plug & Play compatible

Includes: 6VDC power adapter and USB-A male to USB-B female cable

Part No.	Description	Size	Weight (lbs.)	1	10
191450EF	7-Port USB hub	7.9" x 2.8"x1.1"	2.6	\$35.95	\$26.95



7.5" extension cable included

## Expand your single USB port into a stacked 3-port thumbhub.

- USB Revision 1.1 compliant
- Downstream port with OCD (overcurrent detection) and OCP (overcurrent protection)
- LED indicators uplink/down port communication, and OCP status
- Self-powered mode
- Supports full speed (12Mbps) and low speed (1.5Mbps) transfer rate
- Compatible: Windows®98/98SE/2000/ME/MAC OS8.5
- Size: 3.1"L x 0.8"W x 1.2"H
- 7.5" extension cord included

Part No.	Description	Price
208451EF	3-port USB Thumbhub	\$18.95

## USB Thumb Drives

What better way to keep your data safe than to keep it close to you? Thumb drives are compact and fit easily in your pocket or hang it around your neck. Portable and lightweight, no external power needed. No drivers necessary for Windows® ME and above. Windows® 98/98SE drivers available on [www.Jameco.com](http://www.Jameco.com).

- 10 year data retention
- Size: 2.9"L x 0.7"W x 0.4"H

Part No.	Description	1	10
217752EF	16MB	\$25.95	\$23.95
217761EF	32MB	36.95	34.95
217779EF	64MB	51.95	48.95
217787EF	128MB	87.95	79.95
217795EF	512MB	289.95	279.95

## Video and Monitor Cables

### RGB Video Cables

- 75Ω coaxial cable; 6' or 10'
- Pin 1 red, pin 2 green, pin 3 blue, pin 14 white/black vertical, pin 13 gray horizontal
- 5 BNCs to HDDB15-pin male

Part No.	Description	Was	1	10	25
73648EF	6' cable (black)	<del>\$24.95</del>	\$19.95	\$17.95	\$16.15
118068EF	10' cable (black)		31.95	28.95	21.95

### VGA Monitor Cables

- Connects video card to VGA monitor
- IBM PC/XT and higher compatibles
- HDDB15 male to male

Part No.	Description	1	10	100
66173EF	6' monitor cable	\$6.49	\$5.89	\$5.29
148523EF	10' monitor cable	6.95	6.25	5.59

### VGA Monitor Extension Cables

- Extends VGA monitor cable; HDDB15 male-to-female
- IBM PC/XT and higher compatibles

#### 134041EF:

- HDDB15 female with hex nuts and HDDB15 male with thumbscrews
- 66165EF/148531EF:
- Thumbscrews on each end

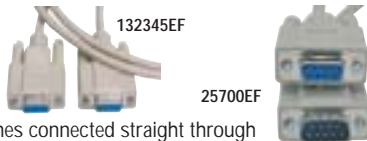
Part No.	Description	1	10	100
134041EF	6' screws/hex nuts	\$4.49	\$3.95	\$3.49
66165EF	6' thumbscrews	6.59	5.95	5.35
148531EF	10' thumbscrews	7.49	6.79	5.99

Do you see what you are looking for?

Log onto [www.Jameco.com](http://www.Jameco.com) for much more.



## DB9 Extension Cables



- All lines connected straight through
- 132345EF/196365EF:
- DB9 female to DB9 female cable with thumbscrews
- 25700EF/148515EF:
- DB9 male to DB9 female cable with thumbscrews
- 181665EF: • DB9 male to DB9 male cable

Part No.	Description	1	10	100	1000
132345EF	6' F-F .....	\$4.95	\$4.49	\$3.95	\$3.49
25700EF	6' M-F .....	<del>\$6.49</del> 4.95	4.49	3.95	3.49
196365EF	10' F-F .....	6.95	6.25	5.59	4.95
148515EF	10' M-F .....	7.49	6.79	5.99	4.95

## DB25 Extension Cables

- All lines connected straight through
- Use to lengthen your standard serial cable or for switch box applications
- Thumbscrews to secure connectors
- Color: gray; except
- P/Ns 174001EF/175290EF: black\*



Part No.	Desc.	Wt. (lbs.)	1	10	100	1000
174001EF	3' M-M*	0.6 ..	\$4.79	\$4.35	\$3.89	\$3.49
65787EF	6' M-M	0.5 ....	6.49	5.89	5.29	4.89
39538EF	10' M-M	0.7 ....	6.95	6.29	5.05	3.69
67070EF	25' M-M	1.4 ..	10.95	9.95	8.95	7.95
164291EF	3' M-F	0.4 ....	4.29	3.89	3.09	2.35
175290EF	3' M-F*	0.4 ....	2.95	2.69	2.25	1.59
163133EF	5' M-F	0.6 ....	5.29	4.75	4.29	3.85
67256EF	6' M-F	0.6 ....	6.45	5.79	5.25	4.69
39511EF	10' M-F	0.7 ....	6.95	6.29	5.05	3.69
101995EF	25' M-F	1.4 ....	11.95	10.79	8.65	6.35

## IEEE 488 Cables

- A variety of cable lengths are offered to ensure that the IEEE system requirements are met (20 meters maximum length with a maximum of 15 devices). These cables are standard IEEE 488 cables with stackable 24-pin GPIB connectors on both ends.
- Color: gray



Part No.	Description	Wt. (lbs.)	1	10	25
73154EF	1 meter	0.8 ....	\$36.49	\$32.79	\$29.49
115781EF	2 meter	1.2 .....	37.95	34.19	30.95
115801EF	4 meter	2.0 .....	34.95	29.75	22.29

## PS/2 Keyboard Extension Cables

- Color: beige
- PS/2 computers
- 6-pin mini DIN female-to-male



Part No.	Description	1	10	100
28548EF	PS/2 6' non-coiled .....	\$4.35	\$3.89	\$3.49
111053EF	PS/2 10' non-coiled .....	5.49	4.99	4.39

## AT-to-PS/2 and PS/2-to-AT Keyboard Adapter Cables

- 28003EF: • Connects AT-type keyboards to PS/2
- 5-pin female DIN to 6-pin male mini DIN
- 85500EF: • Connects PS/2 keyboard to AT
- 6-pin female mini DIN to 5-pin male DIN connectors

Part No.	Length	Color	Weight (lbs.)	1	10	100
28003EF	7.3"	Beige	0.6 .....	\$3.95	\$3.49	\$3.15
85500EF	11.3"	Beige	0.8 .....	5.39	4.85	4.39

## No more tangled cables on the road!

NEW

No matter how carefully you stow your laptop's cables, don't they always seem to have gotten loose and had a party in your absence? And isn't that skinny RJ11 phone/modem wire the worst? Here's the answer. This RJ11 cable extends up to 8'. And when you pack up, give it a tug and it retracts into its lightweight, rugged case like a windowshade. It's completely tangleproof.

Part No.	Description	Price
233349EF	RJ11 Retractable Cable .....	\$4.95



**Lightweight, plastic case keeps the cable from tangling with others in your laptop case. Protects the plastic RJ11 connectors, too.**

Save Space!  
Slim-Line D-Sub Gender Changers

These revolutionary slim-line gender changers are only 0.69" wide, eliminating the space problems caused by standard gender changers. When plugged into your existing cable, they add only 0.44" to the cable. All-metal cases.

- Captive locking screw (male)
- Captive locking nut (female)
- Grounding tangs (male)

Part No.	Description	1	10	100
18497EF	D-sub 9-pin male .....	\$4.95	\$4.49	\$3.99
18489EF	D-sub 9-pin female .....	4.95	4.49	3.99
119319EF	D-sub 15-pin female HD .....	<del>\$4.95</del> 4.29	3.89	3.49
119301EF	D-sub 15-pin male HD .....	4.95	4.49	3.95
18446EF	D-sub 25-pin male .....	4.95	4.49	3.99
18420EF	D-sub 25-pin female .....	4.95	4.49	3.99

## AT and PS/2 Keyboard Adapters

- 159089EF:
- AT keyboard adapter
- Connects PS/2 keyboard to AT
- 6-pin female mini DIN to 5-pin male DIN



- 157930EF:
- PS/2 keyboard adapter
- Connects AT type keyboards to the PS/2
- 5-pin female DIN to 6-pin male mini DIN (PS/2)

SALE



Part No.	Length	Housing	1	10	100
159089EF	1.6"	Metal .....	\$2.95	\$2.65	\$2.39
157930EF	1.7"	Plastic/metal .....	3.49	2.65	2.39

Order Anytime 24x7x365  
Call today! 1-800-831-4242 or  
Log on to [www.Jameco.com](http://www.Jameco.com)

## RJ11 &amp; RJ45 Retractable Cables

These auto-reel retractable cables are compact and convenient solutions for the mobile professional.



- 208362EF: RJ11 type
- For telephone and modem applications
- Cord length: 9'6"
- Includes: Inline coupler
- 208371EF: RJ45 type, Cat 5
- For telephone, modem & networking applications
- Cord length: 6'11"
- Includes: RJ45 right angle adapter and RJ45 to telephone outlet adapter

Part No.	Description	1	10
208362EF	RJ11 cable .....	Was <del>\$9.95</del> \$8.95	\$7.95
208371EF	RJ45 cable, Cat 5 .....	Was <del>\$19.95</del> 16.35	14.85

## Switch Box Adapter Cables

- 177261EF:
- 2' gray 6-pin mini DIN
- M-M non-coiled cable for P/N 79177 switch box, see website
- 114913EF:
- 5' gray 5-pin DIN M-M coiled
- cable for P/N 114155 switch box, pg 70
- 174772EF: • 6' black 6-pin mini DIN M-M
- 174908EF: • 6' gray 6-pin mini DIN M-M
- 112627EF: • 10' gray 6-pin mini DIN M-M non-coiled
- cable for P/N 79177 switch box, see website



Part No.	Description	Length	1	10	50
177261EF	6-pin mini DIN	2' (gray) ..	\$2.95	\$2.55	\$1.89
114913EF	5-pin DIN	5' (gray) ..	4.95	4.49	3.95
174772EF	6-pin mini DIN	6' (blk) ....	4.95	4.25	3.19
174908EF	6-pin mini DIN	6' (gray) ..	5.75	5.15	4.65
112627EF	6-pin mini DIN	10' (beige)	7.95	7.25	6.49
205655EF	6-pin mini DIN	25' (beige)	8.95	7.95	6.95

## Serial Null Modem Cables



- Molded type connectors
- Weight: 0.4 lbs.
- Color: gray
- Length: 10'
- 180697EF Pin outs:
- 1 & 6-4, 2-3, 3-2, 4-6 & 1, 5-5, 7-8, 8-7
- 180582EF Pin outs:
- 2-2; 3-3; 4-5 & 6; 5-7; 6 & 8-20; 7-8;
- (Serial Printer Null Modem)

Part No.	Description	1	10	50
180697EF	DB9 F to DB9 F .....	\$6.79	\$6.09	\$5.49
180582EF	DB25 M to DB9 F .....	6.69	6.05	5.45

### ATX 150-Watt

- Output:
  - +3.3V @ 6A
  - +5V @ 10A
  - +12V @ 6A
  - +5VSB @ 0.72A
  - 5V @ 0.2A
  - 12V @ 1A
- 20-pin ATX form factor
- Mating input conn.: suggest using P/N 38050EF power cord, pg 35 – not included • Built-in fan
- Input volt.: 115/230VAC @ 50-60Hz (auto switching) • Power on/off switch



Special Purchase  
LOW LOW PRICE

Part No.	Product No.	1	10	25
196189EF	MPW-6150F	\$34.95	\$31.49	\$27.95

### AT 250-Watt

- Output:
  - +5V @ 20A
  - +12V @ 10A
  - 5V @ 0.5A
  - 12V @ 0.5A
- Fits popular mini-vertical and desktop cases
- Input voltage: 110-220VAC @ 50-67Hz (switchable)
- One-year warranty
- Size: 5.5"L x 5.9"W x 3.4"H
- Weight: 2.0 lbs.



Part No.	Prod. No.	1	10	25
174465EF	LC250C	\$49.95	\$44.95	\$39.95

23 More @ [www.Jameco.com](http://www.Jameco.com)

Jameco is your Power Source. See our website for additional PC Power Supplies.



**SALE**

Part Number	Mfr.	Product Number	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector (Mating Connector/Cord)	Output Connector (Mating Connector)	Certification	Size (L" x W" x H")	Wt. (lbs.)	Pricing		
											1	10	25
196189EF	Emaos	MPW-6150F*	150	+3.3/6, +5/10, +12/6, +5VSB/0.72, -5/0.2, -12/1	115/230 @ 50-60 switchable	3-prong AC receptacle (P/N 38050EF, pg 35)	ATX	UL/CUL/TUV/CE	7.5 x 4.0 x 1.6	2.5	\$34.95	\$31.49	\$27.95
196111EF	SPI	FSP23560GT	235	+3.3/14, +5/22, +12/8, +5VSB/0.8, -5/0.3, -12/0.8	100/240 @ 50-60 switchable	3-prong AC receptacle (P/N 38050EF, pg 35)	ATX	UL/CUL/TUV/CE	5.6 x 5.9 x 3.4	3.2	34.95	26.25	18.35
152514EF	High Power	JE8250	250	+3.3/16, +5/25, +12/10, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	5.5 x 5.9 x 3.4	3.3	<del>\$60.95</del> 44.95	39.95	36.39
174465EF	Logic Concept	LC250C*	250	+5/20, +12/10, -5/0.5, -12/0.5	110/220 @ 50-67 switchable	3-prong AC receptacle with 6' power cord	AT	UL/CSA/TUV/CE	5.5 x 5.9 x 3.4	2.0	49.95	44.95	39.95
152194EF	American Media	JE2031	250	+3.3/14, +5/25, +12/10, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	6.0 x 5.5 x 3.4	3.5	<del>\$60.95</del> 49.95	44.99	40.49
155539EF	American Media	JE2033	300	+3.3/14, +5/30, +12/8, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	5.9 X 5.5 X 3.4	3.7	<del>\$80.95</del> 69.95	62.95	56.95

\* See photo above

## Computer Switches and Sharing Devices

Over 99% of our products are in stock! Place your order by 6PM EST for same business day shipment.

### ATEN SVGA Monitor Splitters

Duplicate a video signal from one source to monitors up to 210 feet away.

- Suitable for SVGA, VGA & multisync monitors

#### 176866EF: 2-channel

- 1 HDB15 male connector from PC to box; 2 HDB15 female connectors from box to monitors
- Size: 6.6"L x 3.3"W x 1.1"H
- Weight: 1.4 lbs.



176866EF



133866EF

#### 133866EF: 4-channel

- Slide switch for video signal gain control
- Daisy chainable
- Size: 8.8"L x 6.0"W x 1.9"H
- Weight: 3.6 lbs.

Includes: Power adapter and manual

Part No.	Description	1	10
176866EF	2-channel monitor splitter	\$49.95	\$44.95
133866EF	4-channel monitor splitter	68.95	61.95

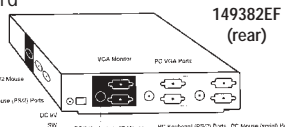


### K/V/M Switch Boxes for up to 4 Computers

- Selects any computer by hot keys or switch
- Serial and PS/2 mouse & keyboard emulation for automatic PC boot up
- Three stage cascable for accessing more computers
- Supports SVGA, VGA and Multisync monitors
- Keyboard LED status recorded and restored while switching among computers
- Auto scan for monitoring PC periodically
- One year warranty
- Size (149382EF): 9.0"L x 6.0"W x 2.0"H (149391EF): 10.0"L x 7.0"W x 3.0"H



149382EF (front)



149382EF (rear)



149391EF (front)



149391EF (rear)

Includes: Manual & power supply (9VDC @ 600mA)

Part No.	Description	Wt. (lbs.)	1	10
149382EF	2 computers	4.0	\$149.95	\$129.95
149391EF	4 computers	7.1	229.95	209.95

Find it @ [www.Jameco.com](http://www.Jameco.com)

See our website for more Switch Boxes and Converters.



### 2-Way & 4-Way Monitor/Keyboard/Mouse-to-PC Switch Boxes

HDD15/5-Pin DIN/DB9M

- Allows 2 or 4 users to share one PC system
- Internal diodes maintain keyboard in powered state when switching between systems
- Each user may need 2 or 4 sets of the following cables: P/N 66173EF, DB15H M-M for monitor; P/N 114913EF, 5-pin DIN M-M for keyboard; P/N 132345EF, DB9 F-F for serial mouse (cables, pg 56)
- Size: 7.5"L x 5.3"W x 2.8"H



132249EF



134017EF

Part No.	Description	Wt. (lbs.)	1	10
132249EF	2-user switch box	1.6	\$17.95	\$15.95
134017EF	4-user switch box	2.3	21.95	19.95

### Monitor/Mouse/Keyboard Cables

- 6' or 32'
- HDB15 male/female for monitor, 5-pin DIN male/female for keyboard, and DB9 male/female for mouse



141284EF

Part No.	Description	Wt. (lbs.)	1	10
141284EF	6' cable	1.6	\$22.95	\$19.95
141276EF	32' cable	4.8	39.95	35.95

## Keyboard/Monitor-to-PC Switch Box

### HDDB15/5-Pin DIN Female

- 2-way switch box
- For 2 PCs connected to 1 keyboard and 1 monitor – diodes maintain keyboard in powered state
- Size: 6.0"L x 4.0"W x 2.3"H
- Weight: 1.3 lbs.



Part No.	Description	1	10
114155EF	2 computers .....	\$14.95	\$13.49

## Serial Port-to-PC Switch Boxes

### DB9 Female

- Connects 2 or 4 serial ports to a PC
- 79126EF: 2-serial port switch box
- Size: 6.0"L x 4.8"W x 2.5"H
- Weight: 1.2 lbs.



79126EF

- 183417EF: 4-serial port switch box
- Size: 6.1"L x 4.0"W x 2.2"H
- Weight: 1.3 lbs.



183417EF

Part No.	Description	1	10
79126EF	2-serial port switch box .....	\$9.95	\$8.95
183417EF	4-serial port switch box .....	19.95	17.95

## Parallel Printer-to-PC Switch Boxes

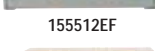
### DB25 Female

- Connects 2 or 4 PCs to one printer
- 20095EF: 2-PC switch box
- Size: 6.0"L x 5.8"W x 2.3"H
- Weight: 1.3 lbs.
- 155512EF: 2-PC switch box
- Size: 7.2"L x 4.9"W x 2.5"H
- Weight: 2.3 lbs.



20095EF

SALE



155512EF

- Includes: DB25 M-M cable
- 20124EF: 4-PC switch box
- Size: 6.0"L x 4.0"W x 2.4"H
- Weight: 1.5 lbs.



20124EF

Part No.	Description	1	10
20095EF	2 PC switch box .....	\$8.95	\$7.95
155512EF	2 PC switch box .....	6.49	5.54
20124EF	4 PC switch box .....	14.95	13.49

## 4 & 2-Port Auto Printer Switches

- Connects up to 4 PCs to 1 printer or 4 printers to 1 PC
- Non-powered
- Compact size
- Auto form-feed selectable
- Transparent to user
- 177421EF: bidirectional; 3.5" software included; 5 DB25 female connectors
- 177412EF: 5 DB25 female connectors
- 177404EF: 3 DB25 female connectors

ATEN



177421EF

SALE



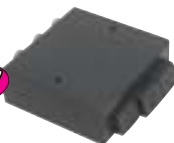
177404EF

Part No.	Description	1	10	25
177421EF	1 to 4 or 4 to 1 .....	\$7.75	\$6.96	\$6.26
177412EF	4 to 1 printer Was \$12.95	3.49	3.15	2.89
177404EF	2 to 1 printer Was \$9.95	2.15	1.95	1.75

## Coaxial Switch Box

- 3-way switch box, switches from a single input source to 3 outputs
- 60dB isolation – shielded housing
- 75Ω input-output
- 5-900MHz UHF/VHF/FM

NEW



Part No.	Description	1	10	25
228241EF	Coaxial switch box ...	\$4.85	\$4.59	\$4.35

## 19" Rack Mount Enclosures

Perfect for equipment setup in home, studio or laboratory.

- Ventilation holes on all sides
- Front and back panels are steel w/ aluminum, pre-punched face plates
- Top, bottom, sides durable 0.035" steel
- Front panel: 0.12" Thick • Black front panel
- All enclosures have handles except P/N 132812EF



Includes: Mounting screws

Part Number	Dimensions (In.)			Weight (lbs.)	Pricing	
	H1	H2	D		1	10
132812EF	1.73	1.25	9.75	6.2	\$39.95	\$35.99
132821EF	3.46	3.0	9.75	7.9	47.95	43.49
132839EF	3.46	2.88	11.75	9.1	53.95	48.59
132847EF	5.22	4.75	11.75	10.6	63.95	55.99
132855EF	5.22	4.75	13.50	11.8	73.95	66.95

## Cabinet Mounting Plate for 19" Cabinet

- Use as industrial chassis mounting plate for servers, PCs or patch panels
- Made of industrial grade steel and aluminum
- Size: 19.0"W x 15.8"D x 3.5"H • Color: beige



Part No.	Description	1	10
149500EF	Cabinet mount plate .....	\$39.95	\$35.95

## Removable HD Rack and Insert

- For quick drive swapping
- Removable storage for 3.5" IDE drive
- Power LEDs
- Keylock for security
- 196040EF: Size: 5.8"W x 8.5"D x 1.5"H
- Weight: 1.2 lbs.
- 196031EF: Size: 4.1"W x 7.5"D x 1.6"H
- Weight: 0.8 lbs.



196040EF

Includes: Inner cable with IDE connector

Part No.	Description	1	10	25
196040EF	IDE rack w/ insert ..	\$27.95	\$20.95	\$14.69
196031EF	Insert for 196040EF	19.95	17.99	15.99

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More Computer Rack Mount Hardware and Cases on our website. Log on today to see complete listings.

Don't worry about back orders.  
Over 99% of our products are in stock!

## 19" Cable Management Racks

Make your cable looms neat and organized with our 2 unit cable management rack. Simply slip in the cable between spaces and route them to their destinations.



208776EF



209031EF

Part No.	Description	1	10
208776EF	Ducting type holder Was \$21.95	\$19.95	\$17.99
209031EF	C clamp type holder Was \$21.95	17.89	16.89

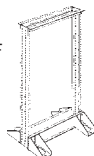
## Relay Rack & Rack Panels

### Rack:

- Black powder coat finish
- 10-32 threaded holes
- Used with 19" wide panels
- 16 gauge CRS base
- Size: 84"H
- 1/8" aluminum side rails
- Size (at base): 19.8"W x 15.3"D x 84"H

133751EF

SALE



### 19" Wide Panel:

- 10-gauge black aluminum
- Size: 1.75"H

133276EF

Part No.	Description	Wt. (lbs.)	1	10
133751EF	Relay rack	21.8	\$179.95	\$159.95
133276EF	Rack panel	0.4	9.45	8.49

## IDE Removable 5.25" Rack Kit for 3.5" Hard Drive w/ Fan

- Supports DMA 66 hard drive
- Removable storage for 3.5" hard drives
- LED for power and hard drive activity
- Retaining lock mechanism
- 12VDC @ 50mA fan
- CFM rating: 5.6
- Size: 5.9"W x 8.7"D x 1.6"H
- Weight: 1.3 lbs.



Includes: Mounting hardware

Part No.	Description	1	10	25
170608EF	Rack kit (IDE) .....	\$29.95	\$26.95	\$23.95

## Bidirectional Non-Buffered Serial-to-Parallel Converter

- Bidirectional conversion of parallel and serial signals
- Serial interface: hardware handshake RTS/CTS, software handshake XON/XOFF; DCE/DTE selectable; parity: odd, even, or no parity; data bits: 7, 8
- Connectors: one DB25 female and one Centronics 36-pin male
- Stop bits: 1 or 2 • Baud rate: 300 to 38,400bps
- Size: 4.0"L x 2.5"W x 1.0"H
- Weight: 0.8 lbs. • One-year warranty



ATEN

Includes: AC adapter (9VAC @ 200mA) and manual

Part No.	Description	1	10	25
116935EF	Bi-converter .....	\$49.95	\$44.95	\$39.95



## Power Strip Outlet Saver

With our high quality power strip outlet saver, you can use all the outlets on your surge suppressors, UPS, and outlet strips. Just plug a bulky power adapter into this cable and free up your other outlets.



Part No.	Description	Length	Cord Type	1	10	100
199777EF	AC Power cord (black)	1'	SVT	\$1.69	\$1.55	\$1.39
208338EF	AC Power cord (beige)	1'	SVT	1.69	1.45	1.09

## Power Strip Saver Double Outlet

Get full use of your power strips. Plug those bulky adapters into these cables and plug the cables into the power strip. Need the extra adapter to be plugged into the power strip? Use the "Y" power strip saver to add an extra adapter.



Part No.	Description	1	10	100
208346EF	Power strip saver ....	\$2.89	\$2.75	\$2.59

## TRIPP-LITE isobar®

## Surge Protectors



139686EF



185113EF

The world's best known, most advanced surge protectors provide total protection against surges, spikes and line noise.

- Up to \$50,000 Ultimate Lifetime Insurance covers Isobar and connected equipment against surge damage for life!
- Diagnostic indicators on Ultra versions alert you to improper outlet wiring, loss of AC power, and damage to protection circuitry
- "Cascade Circuitry" allows you to choose increased noise protection level for your most sensitive equipment • UL 1449 and 1283 listed • Lifetime warranty
- IsoTel model has dual RJ11 jacks for complete modem/fax surge protection
- 4-outlet protectors: 6' cord; 8 and 12-outlet protectors: 12' cord

### Isobar Premium 19" Rack Mount Surge Protector

Part No.	Product No.	Joules	Description	Wt. (lbs.)	1	10
139686EF	IBAR12RM	750	12 outlet, 2 isolated filters	4.7	\$119.95	\$107.99

### Isobar Ultra Premium Surge Protector

19001EF	ISOBAR 8U	2350	8 outlet, 4 isolated filters	3.5	\$69.95	\$62.95
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### Isotel AC/Phone Line Surge Protector

185113EF	ISOTEL 4U	2700	4 outlet, 2 isolated filters	2.7	\$39.95	\$29.99
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## POWERWARE

## 300-VA UPS System

### With Dual Outlet

- Protects against blackouts and brownouts
- Battery charging: less than 6 hours to 90% usable capacity
- Battery backup time: 5-10 mins. @ full load; 10-20 mins. with partial load
- Input voltage: 120VAC @ 60Hz
- Output voltage: 120VAC
- Output current: 2.5 amps (full load)
- Size: 3.4"W x 5.8"D x 13.2"H • Weight: 12.4 lbs.



Part No.	Product No.	Description	1	10
179961EF	PRB300A	300-VA UPS system	\$59.95	\$53.95

## 6-Outlet Surge Protector

- Standard 6-outlet surge suppressor
- Heavy-duty power cord (14AWG x 3)
- RESET/OFF switch with built-in 15A circuit breaker
- Clamping voltage: 400V
- Maximum surge dissipation: 900 joules
- Maximum surge voltage: 6500V
- Maximum spike current: 4500A • Weight: 0.9 lbs.



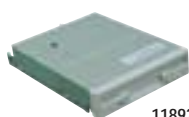
Part No.	Description	1	10	100
216485EF	Surge suppressor	\$6.95	\$6.25	\$5.59

## Around-the-Clock Ordering 24x7x365

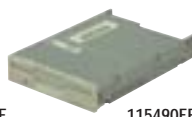
www.Jameco.com 1-800-455-6119

## CD-ROM, Floppy, Hard Drives and Accessories

## 1.44MB 3.5" Internal Floppy Disk Drives



118922EF



115490EF

- IBM PC/XT and higher compatibles
- Compatible with DOS versions 3.3 or higher
- Determines if disk is high or low density
- Size: 4.0"W x 5.9"D x 1.0"H (actual drive size)

Part No.	Mfr. Cross Ref. No.	Mfr.	Color	1	10
118922EF	MPF520-1	Sony	Beige	\$29.95	\$26.95
115490EF	FD235	TEAC	Beige	21.95	19.95

## 3.5" Drive Mounting Kit

- For mounting a 3.5" floppy drive into a 5.25" slot

Includes: Beige faceplate



Part No.	Description	1	10	50
32088EF	Drive mounting kit	\$7.69	\$6.95	\$6.25

## Internal IDE CD-ROM Drives

- 5.25" half-height design
- One-year warranty
- Manufacturer varies

Includes: Audio cable



189448EF

Part No.	Speed	Buffer	kB/sec.	Wt. (lbs.)	1	10
149307EF	24x	256kB	3600	2.6	\$49.95	\$32.95
189051EF	32x	128kB	4800	2.6	34.95	31.49
189069EF	40x	128kB	6000	2.6	39.95	35.95
189077EF	48x	128kB	7200	2.6	49.95	44.95
189448EF	56x	128kB	8400	2.3	59.95	53.95

⌘ Pull

## Place Orders 24/7/365!

## Aluminum IDE Removable Hard Drive Rack with Fan

Easily remove a hard drive from your PC or workstation, safeguard your data and an ideal way to back-up data. Because our Rack Kit is hot removable, you can remove your hard drive without shutting down your computer operations. Aluminum case transfers heat away from the drive for longer and more reliable drive life.

- 5.25" rack kit for 3.5" hard drives
- Drive activity LED
- Aluminum rack
- Built-in fan
- Keylock for security



Part No.	Description	1	10	25
211035EF	Rack kit (IDE)	\$29.95	\$26.95	\$23.95

Did you find what you were looking for here?

If not, log onto our website today to find our entire line of products. [www.Jameco.com](http://www.Jameco.com)

**IDE, EIDE & SCSI Hard Drives****PC/XT/AT and Compatibles**

- IDE drives over 528MB require EIDE controller or higher
- Manufacturers may vary and capacity may exceed specification; we carry Seagate, Western Digital, IBM and others.
- All are 1" in height

**SALE**

124978EF

Part No.	Capacity	Description	Conn. Pins	Wt. (lbs.)	Average Access Time (ms)	Warranty	1	10
115764EF	425MB	3.5" IDE	40	1.7	12.5	3 mos.	\$79.95	\$71.95
118949EF	850MB	3.5" IDE	40	1.7	14	1 year	\$84.95	\$75.95
124978EF	1.27GB	3.5" IDE	40	1.1	14	1 year	Was \$89.95 79.95	71.95
146325EF	1.7GB	3.5" IDE (Fast ATA-2)	40	1.1	12	1 year	99.95	89.95
146333EF	2.5GB	3.5" EIDE (Fast ATA-2)	40	1.0	11	1 year	99.95	79.99
151036EF	3.2GB	3.5" EIDE (Ultra DMA33)	40	1.1	11	1 year	114.95	105.95
151044EF	4.3GB	3.5" EIDE (Ultra DMA33)	40	1.1	11.5	1 year	119.95	109.95
151052EF	6.4GB	3.5" EIDE (Ultra DMA33)	40	1.1	9.5	1 year	129.95	116.95
162261EF	8.45GB	3.5" EIDE (Ultra DMA33)	40	1.2	9.5	1 year	139.95	125.95
189085EF	1.0GB	SCSI	50	1.3	9.6	3 mos.	39.95	35.95

\*\* Pull

**Thermoelectric Cooler Chips**

- Cools down to -30°C (dependent on external temperature)
- T max. = 60°C
- 20 AWG wire leads, 4" long
- Heat or cool by changing direction of current
- Operating voltage: 15.4VDC nominal

**SALE**

172048EF



Part Number	Mfr. Cross Ref. No.	Couples*	Watts	Voltage (max.) DC	Current (max.) A	Size (L" x W" x T")	Pricing	
							1	10
172030EF	TEC30	71	19.7	8.4	4	1.2 x 1.2 x 0.2	\$19.95	\$17.95
172048EF	TEC40	127	35.6	15.4	4	1.6 x 1.6 x 0.2	25.95	22.95
172056EF	TEC50	127	79.1	15.4	8	2.0 x 2.0 x 0.2	33.75	29.35

\* Couples: # of P&amp;N type semiconductor pairs connected electrically in series

**External SCSI Cables for Complete Connectivity**

- For PC/XT/AT and compatibles
- All lines connected

**SALE**

Part No.	Description	1	10	100
73162EF	Male 50-pin Centronics to male 50-pin Centronics SCSI-I to SCSI-I (6') <sup>†</sup>	Was \$2.95 \$2.35	\$2.15	\$1.95
118084EF	Male 50-pin Centronics to male HPDB50 cable SCSI-I to SCSI-II (6')	14.95	13.49	11.95
137568EF	Male HPDB68-pin to male HPDB50-pin SCSI-III to SCSI-II (3')	12.95	11.49	9.95

<sup>†</sup> Also Macintosh<sup>®</sup> compatibles, see above for SCSI type connector guide**EZ/CDPrint Printer**

Introducing the EZ/CDPRINT, the first printer that delivers a low-cost way to create professionally printed CD-R's, Credit Card CD-R's, CD Jewel case liner notes and standard color paper documents. Don't settle for unsightly felt pen scribbles or hard-to-use labels on your CD's. Now print full color images, photos, and text directly on your CD in less than a minute. EZ/CDPRINT is ideal for amateur musicians, family photos, school projects, customer presentations, interactive training or anywhere an extra edge of professional presentation counts.

- Prints a full color CD in about a minute
- Compatible with all inkjet printable CD-R & DVD-Rs
- Special PC and Mac software and templates to print CD, liner notes and more
- Both USB and parallel port connections • Uses standard C60/C62 Epson inkjet cartridges
- Prints paper documents at 12ppm monochrome & 7ppm color • Printer size: 18.0"W x 8.0"D x 7.0"H

Requires: Windows<sup>®</sup> 95/98/2000/ME/XP, Mac OS 8.1 or higher operating systems

Includes: Printer, PC and Mac printer and template software, three printable disks

Part No.	Description	1	5
220708EF	CD printer (software, cable, ink cartridges and CD-R's)	\$319.95	\$319.95
220716EF	100 pk. 40x 700MB 80 min. CD-R	42.95	42.95



220716EF

220708EF

**SALE****Computer Card Brackets**

Fig.: 1 2 3 4 5

- For securing cards into bus slots
- Fits standard PC/XT/AT cases • Length: 4.75"
- See pg 46 for DB connectors

Part No.	Description	Fig.	1	10	100
11754EF	Blank back panel	1	1.89	\$1.79	\$1.59 \$1.45
101717EF	For DB9 connector	2	1.79	1.59	1.45
101733EF	For DB25 connector	3	1.79	1.59	1.45
101741EF	For DC37 connector	4	1.79	1.59	1.45
101830EF	For DB9/DB25 conn.	5	1.99	1.79	1.59 1.45

**CD Cases**

208485EF

208493EF

Part No.	Description	1	10	100
208485EF	Slim black 10 pk.	3.99	\$3.59	\$3.19 \$2.89
208493EF	Slim asst. color 10 pk.	4.95	4.45	3.95

**Back Panel PC Cooling Fan**

- Type: sleeve axial fan
- Back panel mountable
- Operating volt.: 12VDC @ 140mA
- Airflow: 43 CFM
- Noise ratio: 26dBA
- Power: 1.7W
- 10.5" wire with 4-pin Molex power connector
- Size: 4.3"L x 3.5"H x 1.1"Thick • One-year warranty



Part No.	Description	1	10	50
152240EF	PC cooler fan	\$19.95	\$17.95	\$15.95

**ATX Power Supply 15" Extension Cable**

- For use with ATX power supplies
- 20-pin ATX male and female connectors
- Color coded to ATX power supply code
- 15"L x 18 AWG (wires)



Part No.	Mfr. Cross Ref. No.	1	10	100
170237EF	ATX-400-RV	\$6.49	\$5.85	\$5.29

**5.25" Disk Drive Power Splitter**

- IBM PC/XT and higher compatibles
- Splits 4-line Molex male into 2 females

**SALE**

Part No.	Drive	AWG	Length	1	10	100
28353EF	5.25"	18	5'	\$2.95	\$2.69	\$2.15

**SCSI TYPE / CONNECTOR REFERENCE TABLE**

SCSI type	50-pin Centronics DB25	50-pin Header	Half pitch DB50	Half pitch DB68	VHD68 Centronics	VHD68 Centronics
SCSI-I	✓	✓	✓			
SCSI-II			✓	✓		
SCSI-II wide					✓	
SCSI-III					✓	✓
RAID: SCA, SCA-2						✓

## CPU Heat Sinks and Fan

- Excellent for avoiding CPU overheating during extended system on-time
- High efficiency cooling fans
- Easy installation – just snap it in



See page 29 for Heat Sink Compounds

See page 20 for CPU's

Part No.	Description	Size (H" x W" x D")	Agency Approvals	1	10	50	100
196242EF	Heat sink w/ fan for socket 7 (ATX)	2.26 x 2.12 x 1.07	UL/CE/TUV	\$9.95	\$8.95	\$7.95	\$6.95
181278EF	Heat sink w/ fan for socket 7 (ATX)	2.12 x 2.05 x 1.67	UL/CE/CSA	<del>\$9.95</del> 8.49	7.65	6.89	6.19
118092EF	Heat sink w/ fan for 586 CPU w/ snap	2.18 x 2.30 x 1.00	UL/CE/TUV	3.95	3.19	2.39	1.69

## DIMM and SIMM Memory

Part Number	Mfr. Cross Ref. No.	Pins	Description	1	10
148398EF					
148398EF	4MBX64SDRAM	168	4M x 64 10ns Syn. DRAM DIMM (32MB)	\$16.95	\$15.95
148401EF	8MBX64SDRAM	168	8M x 64 10ns Syn. DRAM DIMM (64MB)	35.95	32.29
148419EF	16MBX64SDRAM	168	16M x 64 10ns Syn. DRAM DIMM (128MB)	69.95	62.99
130729EF	JEED07208	72	2M x 32 60ns SIMM EDO module (8MB)	9.95	7.95
130711EF	JEED07216	72	4M x 32 60ns SIMM EDO module (16MB)	12.79	11.49
148443EF	JEED07232	72	8M x 32 60ns SIMM EDO module (32MB)	43.95	39.59
148451EF	JEED07264	72	16M x 32 60ns SIMM EDO module (64MB)	29.95	28.45
75184EF	P364000-XX-6	72	4M x 36 60ns SIMM module (16MB)	28.99	26.99
75168EF	P364000-XX-7	72	4M x 36 70ns SIMM module (16MB)	38.99	36.99
148460EF	8MBX36-60	72	8M x 36 60ns SIMM module (32MB)	48.99	46.99

## Pentium II Class Motherboards

- ATX motherboards are compatible with Intel® Pentium II Processors

**SALE**

See more @ [www.Jameco.com](http://www.Jameco.com)



188074EF



185367EF

Part No.	188074EF	185367EF
Processor	Slot 1*	Slot 1
Speed	233-266 MHz	233-333 MHz
Chip set	440LX	440LX
BIOS	Award	Award
Memory	EDO (72 pin)	EDO (168 pin)
Capacity	384MB	384MB
Slots	6	3
Speed	66 MHz	66 MHz
Slots		
PCI	5	4
AGP	1	1
ISA	3	3
Interfaces		
Hard Drive	4 EIDE	4 EIDE
Floppy	2	2
USB	2	2
Parallel	1	1
Serial	2	2
IrDA	1	None
Sound	None	None
Keyboard	PS/2	PS/2
Video	None	None
Size	12" x 9.6"	12" x 7.4"
Weight	2.6 lbs.	2.5 lbs.
Price	1 \$12.49 10 \$11.25	1 Was \$29.95 \$23.95 10 \$21.19

\* Also supports the Intel Celeron™ processor

Slot 1: Intel Pentium®II

## Celeron 400-700MHz and Pentium III 533-1000MHz Intel 815E (Solano 2) Chipset

- Phoenix BIOS
- 6 PCI slots and 1 AGP slot
- Windows Plug and Play compatible
- Slot 370 type for Celeron 400MHz-700MHz or Pentium® III 533MHz to 1000MHz
- Supports three 168-pin SDRAM PC100/ PC133 memory upgradeable to 512MB
- On-board I/O controller: 2 EIDE ports that support 4 EIDE devices, floppy drive port that supports LS-120 drive; IRDA port
- PS/2 female keyboard and mouse; 2 USB ports; DB9 male and female serial ports; DB25 female parallel port; DB15 female game port; 3 audio I/O jacks (modular connectors)
- 20-pin ATX form factor • Size: 12.0"L x 8.8"W • Weight: 3 lbs.

Includes: Manual and drivers on CD-ROM

Part No.	Mfr. Cross Ref. No.	Description	1	10
218835EF	SY-71SA	Celeron and Pentium® III motherboard	\$64.95	\$59.95



SOYO

## ISA 16-Bit Super VGA Card

### 512KB on Board

- 1024 x 768 resolution in non-interlaced and interlaced modes
- Supports 16 colors; requires 1MB video RAM
- Supports VESA standard graphics & text modes
- Output HDB15 female (analog)
- Emulates VGA, EGA, CGA, MDA & Hercules modes
- One-year warranty

Requirements: IBM AT and higher compatibles

Includes: software and manual

Part No.	Description	1	10	25
104660EF	VGA card	\$49.95	\$44.95	\$39.95



## PCI Graphics Accelerator Card

- High performance SIS6326 8MB PCI graphics accelerator
- 800K polygon/sec
- Supports texture, transparency, blending, wrapping and mirror, fogging and blending, point sampled, linear and bi-linear texture filtering
- Built-in direct draw accelerator
- Supports per pixel texture perspective correction
- 14-bits resolution in IDCT transformation
- Supports Z & alpha buffer • Size: 5.5"L x 2.5"W
- Built-in NTSC/PAL video encoder • Weight: 0.4 lbs.

Includes: CD-ROM manual and drivers

Part No.	Description	1	10
210833EF	PCI accelerator card	\$39.95	\$35.95





**NEW**

**Keyboard  
lights up with  
a cool blue  
luminescence**

## Work or play at your PC under any lighting conditions!

Your friends will glow with envy when they see this unique, trendy keyboard. Lit with a cool blue luminescence, all keys on this PS/2 peripheral are instantly identifiable, even in total darkness. Why break the mood of your favorite game with harsh overhead lighting when you can keystroke with perfect, futuristic, illuminated accuracy?

• Size: 15.3"L x 5.9"W x 1.3"H

• Weight: 1.7 lbs.

Part No.	Description	Price
<b>235563EF</b>	Illuminated PS2 Keyboard .....	<b>\$79.95</b>

**More computer products and accessories on our website. Log on today! [www.Jameco.com](http://www.Jameco.com)**

### **QTRONIX.** Win 95 104-Key Keyboard with Jumbo Trackball



- PC/AT and PS/2 compatible w/ DOS 3.0 or higher
- "N-Key" roll-over for quick typists
- Tactile click sound and feel • Weight: 3.7 lbs.
- Size: 19.0"L x 6.8"W x 1.4"H • One-year warranty

**Includes:** Software and AT cable adapter

Part No.	Description	1	10	25
<b>128717EF</b>	Scorpius 35PM/NET ...	<b>\$99.95</b>	<b>\$90.95</b>	<b>\$84.95</b>

### **COMPAQ** 101-Key Keyboard

**SALE**

- For PS/2 systems
- Tactile touch
- LED indicators for Num, Caps, and Scroll lock
- 12 function keys with separate cursor and numeric keys
- Recommend using adapter P/N 85500EF or P/N 159089EF, pg 68
- Size: 18.3"L x 6.5"W x 1.3"H • Weight: 3.6 lbs.

Part No.	Description	1	10	25
<b>191530EF</b>	101-Key Keyboard ...	<b>\$19.95</b>	<b>\$16.99</b>	<b>\$12.75</b>

### **QTRONIX.** USB or PS/2 3-Button Optical Wheel Mouse

- Ergonomic style 3-button optical wheel mouse
- High tech optical sensor for all surface types
- Size: 3.9"L x 2.3"W x 1.5"H



**System requirements:** IBM PC or compatible, Windows® 98/2000/ME/XP, available PS/2 or USB port

Part No.	Description	1	10	25
<b>199591EF</b>	Lynx-LVII .....	<b>\$29.95</b>	<b>\$26.95</b>	<b>\$24.25</b>

### **QTRONIX.** Trackball with Menu Software

- Detachable wrist strap
- Ergonomic design
- 3.5" disk
- Variable resolution (20-6400 dpi)
- One million cycle life tactile switches
- One-year warranty

**System requirements:** IBM PC/XT and higher compatible systems; MS DOS 3.3 or later, Windows® 95

Part No.	Description	Size (LxWxH)	1	10	25
<b>128995EF</b>	LIBRA 90 PM NET	5.5" x 4.6" x 2.0"	<b>\$29.95</b>	<b>\$26.95</b>	<b>\$24.25</b>

### **QTRONIX.** 22-Key Serial Keypad

- Tactile click-sound and touch
- Auto repeat function
- 9600 bps, data bits: 8, stop bits: 1, start bit: none, no parity
- Serial DB9 connector
- 2-key rollover
- Color: beige
- One-year warranty
- Size: 6.2"L x 4.2"W x 1.3"H
- Weight: 0.8 lbs.



**System requirements:** IBM PC/XT or higher compatibles; and MS DOS 3.X

**Includes:** 3.5" driver diskette and manual

Part No.	Description	1	10	25
<b>129357EF</b>	Scorpius 22RW .....	<b>\$39.95</b>	<b>\$35.95</b>	<b>\$32.49</b>

### **QTRONIX.** 17-Key PS/2 Keypad

A compact keypad designed for use with IBM compatible laptops and desktop PC.

- Auto-repeat function
- Tactile click-sound and touch
- Switch life of 20 million cycles
- For IBM PS/2 and compatibles
- Two key roll over
- Installs into 6-pin mini DIN keyboard connector (no software required)
- One-year warranty
- Size: 5.6"L x 3.4"W x 0.9"D



Part No.	Description	1	10	25
<b>151811EF</b>	Scorpius 20PB .....	<b>\$34.95</b>	<b>\$31.49</b>	<b>\$27.95</b>

### 3-Button Serial Mouse

- Microsoft® mouse compatible
- IBM PC/XT and higher compatibles
- Size: 4.3"L x 2.3"W x 1.2"H



Part No.	Description	1	10	50	100
<b>104441EF</b>	Serial mouse .....	<b>\$4.95</b>	<b>\$4.49</b>	<b>\$4.05</b>	<b>\$3.65</b>

**Ask About Jameco's  
30-Day Money Back Guarantee**



### **PC to TV Converter Box**

- Converts VGA video or Macintosh® 640 x 480 to standard NTSC
- Built-in flicker filter
- Resolution: 800 x 600
- TV brightness control
- Compatible w/ Microsoft® Windows® 3.0 and higher
- Size: 6.0"L x 4.0"W x 1.0"H • Weight: 2.2 lbs.



**System requirements:** VGA-based PC, DOS 3.0 or higher, 640KB RAM or larger

**Includes:** Compact PC to video converter box, transformer, cables and manual

Part No.	Description	1	10
<b>167193EF</b>	Video signal pro .....	<b>\$109.95</b>	<b>\$99.95</b>

### **SMK RF Modulator**

- Output frequency: NTSC Ch. 3/4, switch selectable
- 12VDC RF modulator
- Operating voltage: 12V@ 50mA max.
- Video modulation: 1.0V p-p
- Audio FM deviation: 1.4V p-p
- RF output impedance: 75Ω (F-type connector)
- PC connections: solder tab connectors
- Size: 1.7"L x 1.7"W x 0.7"H • MFG. #: WMN2144-01

**SALE**

Part No.	Description	1	10	50	100
<b>141639EF</b>	RF modulator ..	<b>\$4.95</b>	<b>\$4.49</b>	<b>\$3.59</b>	<b>\$2.65</b>

## Blow those crumbs away!

**Keeping your costly electronic equipment debris-free can be the difference between enjoying your valuable free time or repairing broken equipment.**

Now you can use the same cleaning system that computer and copy-machine techs use nationwide.

Its high power and 4-piece

Micro Cleaning Tool Kit gets into all the nooks and crannies of your keyboard, computers, fax machines, printers, and scanners to bring them back to clean-room condition. Plus, its custom carrying case makes it easy to ensure high level performance of everything you own.



Part No.	Description	Price
<b>219256EF</b>	Data Vac Pro .....	<b>\$68.95</b>
<b>219264EF</b>	Disposable Bags .....	<b>\$4.99</b>

## 480-Watt Multimedia Amplified Speakers

- Input voltage: 120VAC
- 2 speakers
- Magnetically shielded
- 2-channel stereo amplifier
- Push button type power switch with LED indicator
- Knob controls for volume, bass & treble
- Size: 5.5"W x 7.0"D x 9.1"H • Weight: 5.3 lbs.



Part No.	Description	1	10
196066EF	480W speakers .....	\$39.95	\$35.95

## Harman/Kardon Multimedia Amplified System

**SALE**

- 4.5 watt RMS per amplified speaker
- Transducer: 3" full range driver, magnetically shielded
- Frequency range: 90Hz to 20kHz
- Volume control, bass and treble control, LED indicator and headphone jack • Weight: 4.7 lbs.
- Size: 8.5"H x 4.5"W x 5.0"D (per speaker)



Includes: 16VAC @ 1A power supply

Part No.	Description	1	10
211001EF	H/K speaker system Was \$15.95	\$12.95	\$11.69

## Hands-Free Condenser Microphone

**SALE**

- Cord length: 8'
- Connector: 3.5mm male stereo plug
- Size: 1.9"L x 1.2"W x 0.3"H • One-year warranty



Part No.	Description	1	10	50
135247EF	Microphone .....	\$3.69	\$3.15	\$2.35

## In-Ear Stereo Headphones

- 3.5mm input jack connector
- Typical application: CD player
- Color: gray
- 4' Long



Part No.	Description	1	10	100	1000
191880EF	Headphones .....	\$39	\$36	\$32	\$29

## Omnidirectional AM/FM Stereo Antenna

**NEW**

Replace wire antennas on your stereo equipment and receive more stations with this omnidirectional indoor AM/FM antenna. A quality AM/FM indoor antenna that uses patented technology to reduce noise and receive AM and FM broad-

casts with the greatest clarity possible. Picks up broadcast signals from every direction and receives more AM/FM radio stations. Easily installs into any stereo and can be placed on top of the stereo equipment or mounted on a wall. Includes one 75Ω to 75Ω and one 75Ω to 300Ω matching transformer.

Part No.	Description	Price
235011EF	AM/FM Stereo Antenna .....	\$11.95


**NEW**

### Product Specifications:

- Frequency response 110Hz - 18kHz +/- 3dB
- Input impedance: 10KΩ
- Voltage: 110V
- Size speaker: 5.4"H x 2.8"W x 4.6"D
- Size subwoofer : 6.0"H x 4.3"W x 5.4"D
- Weight: 3.14 lbs.

## Super-size sound for your PC, at drive-through prices!

You'll enjoy crisp highs and booming bass when you add this economical but feature-packed set of magnetically-shielded speakers to your computer system. The satellite speakers deliver big stereo sound in a small package that will complement any desktop. And the compact subwoofer discreetly belts out the bass to make your music and gaming experiences the best they can be. User-friendly features include trouble-free A/C power, convenient on/off and volume controls, and a small, classy footprint for flexible installation.

Part No.	Description	Price
233390EF	Powered Subwoofer System ...	\$14.95

## Surge suppressor stops under-desk crawling, bad backs, & toe cramps.



*Mounts neatly to the side of your monitor.*



### Free \$25,000 Equipment Protection Policy

Kensington is so sure their product will protect both your equipment and phones that they back it up with The Kensington Limited Lifetime Warranty that protects your equipment for up to \$25,000 against damage (see package for details).

Use our remote control surge suppressor and stop crawling under your desk or flipping on your equipment power with your toe. Just place the small remote control strip anywhere easily at hand, up to 6 feet away from the outlet strip. Attach the remote control to the side of your monitor with the enclosed

adhesive strips, if you like, to keep your desktop clear. Then power up 4 plugs, or turn off specific outlets with a touch of a button. One plug stays live continuously. The extra long power cord lets you place the base unit up to 9 feet from your wall outlet.

- EMI/RFI filtering: attenuation up to 40dB with frequency range of 600kHz-26MHz
- Energy rating: 420 joules (140 each line)
- Clamping voltage: 330V; telephone protection @ 465V
- Size: outlet strip 12.5"L x 3.0"W x 3.5"H; remote 6.5"L x 2.0"W x 1.0"H
- Current peak: 39,000A
- 15A circuit breaker
- 5 outlets/3 switches
- Failure indicator light
- UL listed

Part No.	Description	Weight	Price
211203EF	MasterPiece Plus Remote	2 lbs. ....	\$39.95

**Special Purchase Limited Quantities!**  
Only \$39.95  
Suggested Retail \$169.95

## Casio mouse pad with label printer saves space!

This combination mouse pad and mini-printer makes labeling chores simple, affordable and fun. Labeling videotapes, envelopes, binders and files is one-click easy! Highlight text in your document, choose a pre-defined phrase, or type labels directly and your 18mm label pops out, ready-to-use. Compatible with Microsoft Windows 98, 98SE and 2000 Professional PCs with USB.

Part No.	Description	Price
235483EF	Mouse Pad Label Printer .....	\$19.95


**NEW**



## Enjoy digital music, FM stereo and voice-recording convenience anywhere, anytime!

This complete, featherweight USB-ready entertainment center measures 2.75"H x 2.0"W x 0.5" thin, but gives you big sound from multiple sources. Autoscan functionality locks-in your favorite FM stations, and 128 megabytes of upgradeable memory delivers MP3/WMA music with a signal-to-noise ratio of >90 dB. And get this: its built-in digital voice recorder captures up to 8 hours of memos, reminders, lectures or presentations for later review.

Part No.	Description	Price
<b>235029EF</b>	MP3 Player/Voice Recorder with FM Headphones .....	<b>\$139.95</b>



## Star Trek™ fans rejoice!

Now you can control up to 4 home theater devices with this realistic replica from the original spaced-out series. Distinctive light and sound effects will accompany your IR commands as you zap your way through the universe of video entertainment. Order now, and enter the next generation of remote control!

Part No.	Description	Price
<b>236030EF</b>	Phaser Universal Remote .....	<b>\$39.95</b>

## Feel the relief with cool 100% glare-free lighting.

Finally, a lamp that lets you work hours longer without eye fatigue or overheating. The ingeniously designed Eclipse Computer Light provides the soft, cool, glare-free light

*No more tired eyes! Dim the room lights and enjoy perfect work lighting without strain or sweat.*

recommended by optometrists. The secret is a bulb concealed in the base, and an airfoil-shaped hood that reflects light softly, so you notice your work, not the light. The cool 13-watt bulb lasts 10,000 hours and can be replaced at

most hardware and lighting stores. Mounts securely with double-sided foam tape. Compact mounting pad even fits flat panel monitors. 8"H x 10"W x 4"D. For glare-free illumination of your documents, add the Glare-Free Document Light & Copyholder. Mounts on either side of your monitor, flips back when not in use. Both include AC power cords with adapter and a 5-year manufacturer's guarantee!



Glare-Free Computer Light on a 16" monitor



Glare-Free Document Light

Part No.	Description	Price
<b>224303EF</b>	Glare-Free Eclipse Executive Computer Light .....	<b>\$38.49</b>
<b>224311EF</b>	Glare-Free Document Light & Copyholder .....	<b>\$29.95</b>

## That's your TELEPHONE? Wow!

You'll hear it every day when you bring one of these sleek, elegant telephones into your life. They're designed by Jacob Jensen who's won more than 100 international art awards and whose works are displayed at N.Y. MOMA. Reminiscent of the venerable B&O phones, get yours for hundreds less. Practical as they are beautiful, they come with all of the features you want in a telephone, such as

*It's not just a phone...it's a statement. And, in spite of their blueblood heritage, these phones are surprisingly affordable.*

number redial, speed dial and they are even wall mountable. The LCD Speakerphone's 3 line LCD displays caller ID with a memory of your last 66 callers. It has a 77 name/number phonebook, is headset ready and operates in 11 languages!

Part No.	Description	Price
<b>227141EF</b>	Right Angle Phone .....	<b>\$59.95</b>
<b>227125EF</b>	The Jensen .....	<b>\$79.95</b>
<b>227133EF</b>	10-Digit LCD Display Phone .....	<b>\$109.95</b>
<b>227150EF</b>	Speaker Phone with LCD Display.....	<b>\$99.95</b>



227125EF



227141EF



227150EF



227133EF

## Wireless weather station does everything but hand you your galoshes.

This multi-function digital weather station is a great gift for the weatherwatcher who likes to know everything—including the future and the temperature "down below." It's an indoor/outdoor wireless thermometer, graphical weather forecaster, lighted alarm clock with snooze alarm, day/date calendar, audible temperature alarm. It's even a pool and pond thermometer.

The outdoor sensor transmits up to 100' through walls and fences. Slide the sensor out of its bracket, plug in the 10' waterproof probe, and check the temperature of your pool or pond. A flashing storm alert warns of severe weather ahead. Programmable audible high/low temperature alerts help prevent household catastrophes. Readings displayed in C° or F°. Base uses 2 AA batteries (included). Remote uses 2 AAA batteries (included).

*This weather station can wake you when you're sleeping, warn you when temperatures reach danger zones, and tell you when your tropical fish are shivering.*



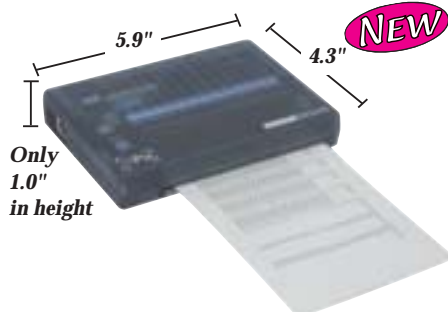
Weather Station

Remote

Part No.	Description	Price
<b>227117EF</b>	Wireless Weather Station Was <del>\$94.95</del> <b>\$49.95</b>	



## Thermal Palm Printer



Palm-sized computers and PDAs are great, but printed output can be a challenge. Enter the Pocket Printer. Now, you can output sharp text and continuous-tone graphics, anywhere and anytime. Everything you need is in the box: paper, serial cable, AC adaptor, travel bag and software for popular PDAs and desktops. With wireless IR or serial-cable connections, this miniature wonder puts printer power in your pocket, at an unbeatable price.

Part No.	Description	Price
<b>233357EF</b>	Mobile Pocket Printer .....	<b>\$44.95</b>

## At \$9.95 you can afford to test it on a couple of twenties.

We've all wanted a shredder from time to time, but at these prices it's just too hard to pass up. For a ten spot you can protect yourself from prying eyes and "dumpster divers" with a personal shredder. The Fellowes strip-cut paper shredder (219184EF) is designed to go anywhere you need it, shreds sensitive documents into "unreadable strips." Auto-start/stop means you can feed in up to 7 sheets at a time (staples, paper clips and all!) with one-handed ease; no fumbling for a switch. And at this unbelievable price, you can turn every basket in your home and office into a maximum security receptacle.



**Strip-Cut**



**219176EF**

For an added measure of destruction of top-secret materials, use the Fellowes factory refurbished confetti-cut shredder (219176ED). Originally new at \$129, it is an equally-great value now at \$49.95. It features faster throughput, greater capacity and a confetti-cut to make your discarded documents disappear, and disappear for good. To keep prying eyes from poaching your private business, either model will turn that stack of confidential paperwork into a handful of scrambled dregs with shredded ease.



**Confetti-Cut**

Part No.	Description	Price
<b>219184EF</b>	Fellowes Brand-New 7 pg. "Strip Cut" Shredder .....	<b>\$9.95</b>
<b>219176EF</b>	Factory Refurbed 12 pg. "Confetti Cut" Shredder .....	<b>\$49.95</b>

## Zip open your mail with the greatest of ease!

Open your important correspondence in style with this handy little cordless wonder. Paper cuts and torn contents are a thing of the past; just place the edge of each envelope in the self-feeding slot, and your letters of all shapes and sizes glide through to be effortlessly, professionally and safely opened. No efficient desk should be without one!

Part No.	Description	Price
<b>235475EF</b>	Handheld Letter Opener .....	<b>\$9.95</b>



## Wireless keyboard and mouse set you free and end desktop cable clutter.



Tired of tugging at the cables that tie your keyboard and mouse to your PC? Replace them with this completely wireless multimedia keyboard and mouse. Just plug the receiver into two PS/2 ports on your PC, install the software, and you're jammin'. The system uses radio frequency (RF) communications technology, not infrared like many other wireless keyboards. So you don't have to worry about staying within line-of-sight of the receiver. In fact, you can use the keyboard and mouse up to 3' away. Keyboard includes 16 Internet and media hot keys. Opto-mechanical mouse features 3 buttons and scroll wheel, 400 dpi hardware high resolution. Includes 2AA batteries for keyboard; 2AAA batteries for mouse, user's guide, multimedia drivers.

Part No.	Description	Price
<b>233381EF</b>	Wireless RF Keyboard and Mouse .....	<b>\$29.95</b>

## Keep dangerous spikes and surges out of site, and out of mind!



**Cable/satellite/antenna connection**

Protect your valuable equipment as you eliminate clutter with this easy-to-install surge protector. This unit is a direct replacement for your existing AC wall plate; no wiring is required. Your cable/satellite/antenna connection and two outlets are fully protected against damage from harmful electrical spikes and surges. Two safe-operation lights ensure correct installation and active protection.

Part No.	Description	Price
<b>235002EF</b>	RCA Universal Surge Protector .....	<b>\$12.95</b>

Guard against power spikes and surges as you protect your modem/fax/phone system from harm. No complicated wiring is required; this easy-to-install surge protector is an effortless, plug-in replacement for your existing AC wall plate. Two safe-operation lights ensure correct installation and active protection of your valuable equipment.

Part No.	Description	Price
<b>234991EF</b>	RCA Universal Surge Protector for Phone/Fax .....	<b>\$12.95</b>



**Simply plug in your RJ11 cable for added security**



## Pick-up Line! Now you never need to miss another call while you're online.



Bright LEDs immediately alert you to an incoming caller; just pick up the phone, and you're seamlessly connected to your friend or colleague. When your conversation is finished, simply hang up and your modem takes over to resume your online session. Works with fax machines too! In addition to saving missed calls, this convenient little box will save you money, too. No expensive additional line is needed, and you can avoid annoying monthly charges for similar services from your internet service provider. Installation is a breeze. An A/C adaptor is included for power, and with your existing call-waiting service, you'll be ready to attain a new level of peace of mind, right out of the box.

Part No.	Description	Price
<b>234974EF</b>	Internet Call Waiting Alert .....	<b>\$44.95</b>

**NEW**

## Zip, you're wired. Zip, its gone. Disappearing cable trick.



*These thin, flexible cables weigh just half an ounce and roll up like a window shade for manageability?*

Don't you hate lugging those heavy, bulky cables around with your laptop? Now, you don't have to. ZipLinq USB and Firewire cables are as light-weight, thin and flexible as a shoelace, and they store themselves tangle-free in a case the size of a quarter. To connect the cable, take a connector in each hand and pull to the length you need, up to 2-1/2'. Ready to roll? Tug gently, and the cable zips neatly into its case like a window shade. Durable ABS housing protects the cable during storage.

Part No.	Description	Price
<b>226405EF</b>	Firewire M 4-pin to Firewire 4-Pin .....	<b>\$13.49</b>
<b>227424EF</b>	Firewire M 6-pin to Firewire 4-Pin.....	<b>\$15.95</b>
<b>227459EF</b>	Firewire M -pin to Firewire 6-Pin.....	<b>\$14.95</b>
<b>226392EF</b>	USB A to Mini USB 5-Pin.....	<b>\$11.95</b>
<b>226384EF</b>	USB A to Mini 4-pin .....	<b>\$11.95</b>
<b>226376EF</b>	USB A M to USB F .....	<b>\$11.95</b>
<b>226368EF</b>	USB A to USB B .....	<b>\$11.95</b>

## Cell phone battery adapters.

Cell phones are an essential item in today's world of communicating. Everyday, you recharge your cellphone battery, use your phone all day long and before you know it the battery goes low. With these cell phone battery car adapters, you can extend the power of your battery for the rest of the day by simply plugging the adapter into the cigarette lighter of your vehicle and just like that you have a second source of power while at the same time charging the battery.

Part No.	Description	Price
<b>218747EF</b>	Kyocera DC Power Cord .....	<b>\$9.95</b>
<b>218798EF</b>	Samsung DC Power Cord .....	<b>\$9.95</b>
<b>218771EF</b>	Ericsson DC Power Cord .....	<b>\$9.95</b>



Part No.	Description	Price
<b>218659EF</b>	Motorola DC Power Cord .....	<b>\$9.95</b>
<b>218675EF</b>	Nextel DC Power Cord .....	<b>\$9.95</b>
<b>218667EF</b>	Nokia DC Power Cord .....	<b>\$9.95</b>
<b>218712EF</b>	Samsung DC Power Cord .....	<b>\$9.95</b>
<b>218763EF</b>	Motorola DC Power Cord .....	<b>\$9.95</b>

## The most brilliant cell phone battery idea under the sun!

*Harness the unfailing power of the sun and you'll never be stranded without cellphone power.*



Cellphone dead? Never be without "juice" again. This incredible solar cellphone battery keeps itself charged on nothing more than sunlight. It features an environmentally friendly lithium-ion battery and a photovoltaic (solar) cell just like the ones that produce electricity for NASA satellites. To charge the battery, just expose the cell to sunlight. No other power source

needed! A 15-20 minute charge gives enough talk time for an emergency call. A full charge takes about 5 hours. It charges even faster from your regular AC battery charger,

making this the only battery you need to pack. Stuck in a hotel room with your charger at home? Place the solar battery under a bright light bulb for slow, overnight charging. A status indicator shows you whether you're charging, so you never have to guess. It's a must-have for everyone from business travelers to backpackers.

*"I have used your solar battery on my Motorola phone for two-and-a-half years in an offshore environment. It has worked perfectly. I carry it in my backpack and I know that it will work when I need it."*

— K. Bullard, National Park Service

*Side view attached to phone*



Part No.	Description	Price
<b>223950EF</b>	Motorola V60 Solar Battery.....	<b>\$39.95</b>
<b>223968EF</b>	Nextel I60/I90/I95 Solar Battery .....	<b>\$39.95</b>
<b>223976EF</b>	Nokia 3360/3320 Battery.....	<b>\$39.95</b>
<b>223984EF</b>	Nokia 3390/3395/3310 Battery.....	<b>\$39.95</b>

## Charge your cell phone from your PC or Mac USB port.



*Comes with 6 different adapters to fit any cell phone.*



*Car Outlet*



*Charge your cellphone without a heavy adapter, a cradle, or even a power outlet! Bet you didn't know you could do that!*

Leave that heavy cell phone charger at home and "juice up" from your computer's USB port. Just plug one end of the 2-1/2' ZipLinq cable into the USB port of your PC, Mac or PDA. Plug the other end into your phone charger jack. In as little as one hour, you're talkin' the talk again. ZipLinq cables are incredibly convenient, because they're light, flexible, and they zip away into a case no wider than a quarter. The 12V and 110V adapters allow you to use your USB-to-Cell phone charger cable with a wall or car outlet.

Part No.	Description	Price
<b>226317EF</b>	USB-to-Cell phone Charger Cable For Motorola,Siemens, Ericsson & Nokia .....	<b>\$24.95</b>
<b>226325EF</b>	USB-to-Cell phone Charger Cable For LG Mobile, Sanyo, Samsung & Kyocera.....	<b>\$19.95</b>
<b>227432EF</b>	12VDC-to-5V USB Charger (car outlet) ...	<b>\$14.95</b>
<b>227441EF</b>	110 VAC-to-5V USB Charger (wall outlet) .....	<b>\$15.95</b>

## Share printers, files, and DSL inexpensively through the phone wiring already in your home!

Multiple PC users in your house? Turn your home phone wiring into an instant network for sharing printers, files, modems, applications, DSL lines, Internet access, and for playing interactive games. This inexpensive solution lets computers up to 500 feet apart communicate over existing phone wiring. There's no drilling or cable snaking from room-to-room. And you don't lose a single phone jack or printer port. Installation is easy. The manual is excellent, and you get 90 days support free. Package includes hardware and

software for networking 2 PCs: 2 adapters (Intel 21145 phone line/Ethernet LAN controller), 2 parallel cables, 2 phone cables, 1 CD-ROM. Purchase an additional package for each 1-2 PCs. Requires 486 PCs or higher, Windows® 95/98, 8 MB RAM, 18 MB hard disk space, parallel port for printer use. At least one PC must have CD-ROM drive, modem, Internet access.

Part No.	Description	Price
220417EF	Any Point™ Home Network.....	\$29.95



Back View Front View

*Don't waste money on separate printers, modems and Internet connections. Install the AnyPoint Home Network, and let everyone share at speeds of up to 1Mbps.*



Actual Size

## Add USB versatility to your computer with one-step, pocket-sized ease!

Instantly add more USB 1.1 ports to your desktop or notebook computer with this compact, compatible hub. Perfect for your laptop case, it tucks into any available space to provide plug-and-play versatility, on your desk or on the road. Whether you're a PC power user or a Mac fanatic, this hub will seamlessly expand your hardware horizons.

Part No.	Description	1	5
233365EF	4 Port Mini Hub .....	\$9.95	\$8.95



## One simple tool and you have two computers at your command.

This two port switch box can access TWO computers from one keyboard, mouse, and monitor. No interface card or software to configure. Operation is as simple as pushing a button on the front panel and entering hot-key commands.

- Supports Microsoft® IntelliMouse, Logitech Net Mouse, etc.
- Supports operating systems DOS, Win 3.x, Win95/98/98SE/2000/ME, WinNT, Netware, Unix, Linux
- High VGA resolution
- Keyboard and mouse pluggable at anytime
- Hot-key function allows easy computer access
- Audible sound for switching port confirmation
- Port and console connectors: female PS/2 keyboard and mouse, female HDDB15 for video
- Size: 4.3"L x 3.0"W x 1.2"H

Part No.	Description	Price
216063EF	2-Port K/V/M Switch Box .....	\$69.95
204062EF	PS/2 Cable .....	\$16.95

## Your solution for seamless roaming



Wireless 802.11b Base Station

Wireless networking provides students, workers and laptop users seamless roaming connectivity to your network or cable modem.

PHOEBE 802.11B wireless products are perfect for small businesses, schools

and for the home, and will boost productivity while saving you the cost of installing cables throughout your building or home. Simply plug-and-play and you have a connection to your network in minutes. Jameco has reviewed a lot of networking products and companies

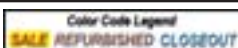
over the last 12 months and has chosen PHOEBE Micro's products because they offer the best value, performance and quality. The wireless access-point-unit bridges wired and wireless segments of the network. The wireless USB LAN adapter can be used to extend your existing network to remote sites in your building.



- 11 channels
- Freq. bandwidth: 2.4 ~ 2.4835GHz
- DSSS (direct sequence spread spectrum) provides superior noise immunity to broadband interference
- 64/128bits WEP encryption
- IEEE802.11b standard

220652EF	215600EF	215618EF
Transmission power: 18dBmAccess point, access point client & wireless bridge operation mode-82dBm	5MHz Channel spacing PCMCIA Type II; built in 3D antenna. Indoor range: up to 50 meters. Outdoor range: up to 300 meters -80dBm	Channel spacing: 5MHz; Interface: USB1.1 (client) Indoor range: up to 90 meters Outdoor range: up to 300 meters -80dBm

Part No.	Description	Price
220652EF	Wireless Access Point 11Mbps.....	\$97.95
215600EF	PCMCIA Wireless Network Card .....	\$52.95
215618EF	Wireless USB Adapter .....	\$59.95



Order 24/7 Toll Free 1-800-455-6119

**Over 99% of our products are in stock!**  
**Place your order by 6PM EST for same business day shipment.**



### Modular Cable Tester with Remote Terminator

Easily read correct pin configuration of 10baseT, 10base2, RJ45/RJ11 modular cables, 258A, TIA568A/568B, token ring, etc. Test installed cables either on wall plate or patch panel from a distance.



CE

- Check for cable continuity, miswiring, open, short, grounding and pin configurations
  - Cable adapters: RJ45 M-M, 2 RJ45M-BNCM & BNC F-F
  - On-board connectors: 2 RJ45F (tester) and 1 RJ45F (remote)
  - Size: 4.0"L x 2.5"W x 1.0"H (Main console)
  - Size: 4.0"L x 1.3"W x 1.0"H (Remote) • Wt.: 0.7 lbs
- Includes:** Manual and test cables

Part No.	Description	1	10
145710EF	Modular cable tester .....	\$84.95	\$76.49

### RS-232 Line Status Tester

Identifies simple interface problems which you can repair yourself. Targets the status of lines 2, 3, 4, 5, 6, 8, 11, 19 and 20. Connectors: male to female DB25.



Part No.	Description	1	10	100
14285EF	Check line tester .....	\$8.95	\$8.09	\$7.25

### Flexible Multilink RS-232 Tester & Breakout Box



Visually indicates the status of lines 2, 3, 4, 5, 6, 8, 20 and 22 on the DTE and DCE sides.

Provides signal status at a glance. Complete cable "breakout" & reconfiguration. Connectors: DB25 male & DB25 female.

- Cable length: 4" • Size: 3.5"L x 3.3"W x 1.0"H
- Includes:** handy carrying case, 10 jumper wires and a device wiring chart

Part No.	Description	1	10	25
25945EF	Tester/breakout box .....	\$22.95	\$19.95	\$17.95



### Diagnostic Card for PCI-Bus Systems

This is the first diagnostic card for monitoring Power-On-Self-Test results in systems using PCI-Bus architecture.

- Plugs into any PCI I/O slot
- Digital indicators for every POST code error
- LEDs for monitoring power (DC): +12, -12, +5, +3
- LEDs for clock and reset failure
- Comprehensive manual w/ error codes from all major BIOS manufacturers including AMI, AWARD, PHOENIX and more • One-year warranty



Part No.	Description	1	10
135108EF	PCI-POST diagnostic card....	\$219.95	\$197.95

### Computer Monitor & NTSC Tester

Mac, PC and TV

- Tests VGA, Super VGA, Mac monitors and TVs
- Checks full-field color bars, color raster, dots (static and dynamic convergence), cross-hatch and windows (power supply regulation, checks for a clear distinction between white and black portions)
- Connectors: HDDB15F, DA15F
- Two video connectors for TV, composite and S-video
- Power with either a 9V battery or an external DC adapter (recommend P/N 151095EF, pg 95 or P/N 100845EF, see website)
- One-year warranty
- Size: 5.5"L x 3.0"W x 1.4"H • Weight: 0.7 lbs.



GME

Part No.	Description	1	10
149729EF	Computer monitor tester ....	\$189.95	\$179.95

### Short Haul Modem

- Up to 38,400 baud
- Will communicate over 6.3 miles of cable
- No external power required
- DCE/DTE selectable
- Xon-Xoff or hardware handshaking
- RS-232 interface (DB25 female)



ATEN

Part No.	Description	1	10	25
116581EF	Short haul modem ..	\$29.95	\$26.95	\$23.95

### QUIKLINK Automatic Telephone Ring Down Unit

- Applications: elevator and door entry phones; in-office and off-premise emergency hotlines; tie lines between phones, PABX and Key systems; CO line simulators for sales demonstrations; testing rings, answering, and signal path functions in telecom repairs, installation and production
- Ringing power: 70V @ 20Hz modified square wave
- Power input: 12VAC @ 700mA (max.)
- Line feed type: two wire unbalanced
- Max. loop resistance: 600Ω • Term.: 4-40 screws
- LED hook status indicator; ringing cadence: continuous/1 second on 1 sec. off/2 sec. on 2 sec. off/2 sec. on 4 sec. off; additional power input: 20-28VDC @ 300mA max.; RJ11 terminations

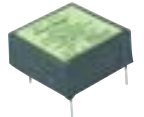


Part No.	Dimensions	1	10
179936EF	4.2"L x 2.5"W x 0.5"H .....	\$99.95	\$89.95

### Black Magic Telephone Ringing Generator

Switching inverter that produces low-frequency alternating current to signal telecom ringers or equivalents.

- Frequency: 20Hz
- Series resistor: 300Ω
- Nominal output voltage: 86 Vrms
- No reverse polarity protection



Part No.	Product No.	1	10	25
145816EF	LBMR12 .....	\$26.95	\$24.49	\$21.95

### ATT Fax Switcher

- Features automatic ring reduction, answering system transfer and transfer timer, extension in use detection and calling tone detection, dial pulse / rotary transfer, unanswered call transfer, reverse modem detection, remote call alert, line interrupt protection, calling tone detection
  - System capacity: line-in, answering machine, phone, modem/fax connection
- Includes:** 12VAC @ 830mA power supply, 6' 11" telephone cable, and manual



Part No.	Product No.	Description	1	10
152004EF	ATT200A	Fax switch .....	\$24.95	\$22.49

**See our website for our complete collection of networking products.  
Log on Today! [www.Jameco.com](http://www.Jameco.com)**

### Charge and sync your PALM or IPAQ with one cable; thin as a shoelace.

A boon for frequent travelers, ZipLinq manage all your PDA power and data transfer functions with a single cable. No charger cradle needed.

Imagine being able to charge the battery on your PDA, sync it to your PC, and download contacts...all with a single cable as flexible as

a shoestring. If you're always on the go, the ZipLinq PDA cable is your new best friend. Lighter and more flexible than any cable you've ever seen — even a phone cord —

ZipLinq transfers data at speeds up to 12 MBps while simultaneously charging your PDA battery. When it's done, the 2-1/2'

cable zips away into a durable case the size of a coat button. Now you see it...now you don't.

Part No.	Description	Price
226350EF	Palm Sync-N-Charge for ME00s, 1750 and M130.....	\$13.95
226333EF	IPAQ Sync-N-Charge for 36xx and 37xx series.....	\$13.95
226341EF	IPAQ Sync-N-Charge for PC38x, 39x & 5400 series .....	\$13.95



## External 56kbps Fax/Modem

- Digital telephone answering machine with voice mail system
- RS-232 (DB9 female) interface
- Modem line speed: 300 – 56000bps
- Standard Compatibility: ITU-T V.92, V.90, V.34, V.32, V.32bis, V.23, V.22bis, V.21, and Bell 103, 212A
- Error Correction: ITU-T V.42, MNP2-4
- Data Compression: ITU-T V.42bis, MNP5
- Flow Control: RTS/CTS, XON/XOFF
- Comment Set: TIA/EIA 602 "AT" command set
- Fax /Modem Line Speed: 2400 – 14400bps
- Standard Compatibility: ITU-T V.17, V.27 ter, V.29
- Command Set: Class 1, 1.0, 2 and associated AT command sets
- Size: 6.3"L x 4.0"W x 1.3"H • Weight: 1.8 lbs.



**System requirements:** Pentium or PC compatible with 16MB of memory, available RS-232 slot; Windows® 9x/ME/NT4.0/2000/XP

**Includes:** RS-232 cable (DB25/DB9 female to DB9 male); phone cord, 9VAC@1A power supply, CDROM drivers and manual

Part No.	Description	1	10
216493EF	Conexant V.92 serial modem	\$49.95	\$44.95

## NETGEAR® PCMCIA Network Card

Plug into the power of networking – share printers, share access to the internet, send and receive email and messages, drag and drop files between computers.



- Auto detection of 10/100 Mbps speed (10Base-T / 100Base-Tx)
- Full duplex capability
- Plug and play, easy installation • PCMCIA type II
- LED indicator for 100Mbps activity and link activity

**Requirements:** 486/Pentium® compatible laptop, PCMCIA slot (type II), Windows® operating system

**Includes:** 3.5" driver software, PCMCIA to RJ45 adapter and RJ45 network cable

Part No.	Description	1	10
210972EF	PCMCIA network card	\$29.95	\$27.95

## PHOEBE Personal Fast Ethernet Switch Hub

JAMECO's choice as the best performance/value combination in networking – PHOEBE.



- IEEE 802.3 (10Base-T) / 802.3U (100Base-TX) compliant
- Auto MDI/MDIX, auto negotiation RJ45 ports
- Store and forward method
- Packet forwarding rate: 10Base-T – 14880pps to 10Mbps; 100Base-TX – 148800pps to 100Mbps
- 8k media access control (MAC) addresses
- Buffer memory size: 256k bytes RAM
- LED indicator for power and link activity

**Includes:** 7.5VDC @ 1A power supply, installation guide and mounting hardware

Part No.	Description	Size (LxWxH)	1	10
215642EF	8-port	6.7" x 3.9" x 1.2"	\$49.95	\$44.95

## Greater security and network convenience are only minutes away.

Your LAN needs a firewall/router that's ready for anything, and this is the one. This beauty is cable or DSL-ready, wireless-ready, Windows®, Unix, Linux or Mac-ready, and ready for any attack a would-be hacker might throw at your sensitive files.

This unit's Installation Wizard configures its four smart ports to link your machines with automated ease, allowing them to share data and your broadband connection with state-of-the-art security.

### Specifications:

- 4 (LAN) 10/100 auto-sensing ports
- 1 (WAN) 10/100BaseT Ethernet RJ45 port to connect to any broadband modem such as DSL/Cable
- Wireless slot for NETGEAR MA401 PC card
- Security protection: Firewall – SPI (Stateful Packet Inspection), DoS (Denial of Service), IDS (Intrusion Detection System),

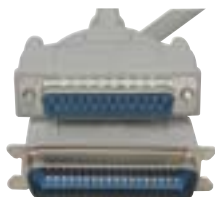


- VNP functionality: NAT traversal, PPTP and L2TP
- Model of operation: NAT (Network Address Translation), static routing, unrestricted users per port
- IP address assignment: static IP address assignment, internal DHCP server on LAN, DHCP client on LAN, PPoE client support
- 40/64 and 128-bit WEP encryption
- Smart wizard to automatically detect ISP address type, port range forwarding, exposed host, enable/disable WAN ping, MAC address cloning, NTP support, URL content filtering

**Includes:** 10' CAT5 cable, power adapter, user guide & CD-ROM software

Part No.	Connector Type	Price
233331EF	4-Port Firewall Router	\$99.95

## The need for speed!



The IEEE 1284 is the standard in high-speed printing. Compatible with bidirectional communication data flow resulting in speeds up to 10 times faster than conventional applications.

- Double shielded with 28 AWG stranded twisted pair inner conductors
- Molded shells, PVC plastic
- Color: gray
- Weight: 0.6 lbs.

Part No.	Connector Type	Price
223845EF	6' DB25 M-Centronics Parallel 36 M ...	\$11.95

## Audio/Video Adapter (CAT 5 UTP)



- Converts impedance of video/audio signals to 100Ω for transmission over CAT 5 UTP cable
- Supports both NTSC or PAL video signals
- Built-in impedance matching device and filter for video and audio signal transmission
- Use with existing premises wiring & wall jacks for easy & cost effective installation
- Video transmission distance: 1000'color/2000' black/white

**220880EF:** Signal pairs: video (BNC), CAT pair 4 (RJ45); audio 1 (RCA); CAT pair 3 (RJ45); audio 2 (RCA), CAT pair 2 (RJ45)

**210471EF:** Single pair: video (BNC), CAT pair 1 (RJ45)  
**Includes:** 1 RCA to BNC adapter & 2 mounting screws

Part No.	Description	Price
220880EF	BNC/RCA/RJ45	\$42.95
210471EF	BNC/RJ45	29.95

## Pomona® Test Lead Holders

- Length: 11"
- 155985EF:**
  - Max cable dia.: 0.450"
  - Color: blue
- 155977EF:**
  - Max cable dia.: 0.320"
  - Color: black
- 155969EF:**
  - Max cable dia.: 0.210"
  - Color: orange



155985EF



155977EF

Part No.	Prod. No.	No. of Slots	1	10	25
155985EF	2708B	9	\$9.95	\$9.45	\$8.95
155977EF	4408	10	9.95	9.45	8.95
155969EF	1508	14	9.95	9.45	8.95

## New cat 6 technology improves performance effortlessly.



The difference between category 5e and category 6 is in the transmission performance, and extension of the available bandwidth from 100 MHz for category 5e to 200 MHz for category 6. This includes better insertion loss, near end crosstalk (NEXT), return loss, and equal level far end crosstalk (ELFEXT). These improvements provide a higher signal-to-noise ratio, allowing higher reliability for current applications and higher data rates for future applications.

Although category 6 and category 5e connectors may look alike, category 6 connectors have much better transmission performance. This means that a category 6 connector couples about 1/12 of the power that a category 5e connector couples from one pair to another pair. Conversely, one can say that a category 6 connector is 12 times less "noisy" compared to a category 5e connector. This vast improvement in performance was achieved with new technology, new processes, better materials and significant R&D resources, leading to higher costs for manufacturers.

Part No.	Description	Price	Part No.	Description	Price
219758EF	Cat 6 Patch Cable Black 3' .....	\$6.29	219838EF	Cat 6 Patch Cable Green 25' .....	\$13.49
219766EF	Cat 6 Patch Cable Black 7' .....	\$7.99	219846EF	Cat 6 Patch Cable Green 50' .....	\$22.49
219774EF	Cat 6 Patch Cable Black 14' .....	\$8.99	219900EF	Cat 6 Patch Cable Red 3' .....	\$6.29
219782EF	Cat 6 Patch Cable Black 25' .....	\$13.49	219918EF	Cat 6 Patch Cable Red 7' .....	\$7.99
219791EF	Cat 6 Patch Cable Black 50' .....	\$22.49	219926EF	Cat 6 Patch Cable Red 14' .....	\$8.99
219854EF	Cat 6 Patch Cable Blue 3' .....	\$6.29	219934EF	Cat 6 Patch Cable Red 25' .....	\$13.49
219862EF	Cat 6 Patch Cable Blue 7' .....	\$7.99	219942EF	Cat 6 Patch Cable Red 50' .....	\$22.49
219871EF	Cat 6 Patch Cable Blue 14' .....	\$8.99	220003EF	Cat 6 Patch Cable White 3' .....	\$6.29
219889EF	Cat 6 Patch Cable Blue 25' .....	\$13.49	220011EF	Cat 6 Patch Cable White 7' .....	\$7.99
219897EF	Cat 6 Patch Cable Blue 50' .....	\$22.49	220020EF	Cat 6 Patch Cable White 14' .....	\$8.99
219707EF	Cat 6 Patch Cable Gray 3' .....	\$6.29	220038EF	Cat 6 Patch Cable White 25' .....	\$13.49
219715EF	Cat 6 Patch Cable Gray 7' .....	\$7.99	220046EF	Cat 6 Patch Cable White 50' .....	\$22.49
219723EF	Cat 6 Patch Cable Gray 14' .....	\$8.99	219951EF	Cat 6 Patch Cable Yellow 3' .....	\$6.29
219731EF	Cat 6 Patch Cable Gray 25' .....	\$13.49	219969EF	Cat 6 Patch Cable Yellow 7' .....	\$7.99
219740EF	Cat 6 Patch Cable Gray 50' .....	\$22.49	219977EF	Cat 6 Patch Cable Yellow 14' .....	\$8.99
219803EF	Cat 6 Patch Cable Green 3' .....	\$6.29	219985EF	Cat 6 Patch Cable Yellow 25' .....	\$13.49
219811EF	Cat 6 Patch Cable Green 7' .....	\$7.99	219993EF	Cat 6 Patch Cable Yellow 50' .....	\$22.49
219820EF	Cat 6 Patch Cable Green 14' .....	\$8.99			

## Category 5e Network Cables



- 4 pair
- 8P8C
- High-flexibility
- 24 AWG (7 x 43) stranded
- "Snagless" boot
- Achieve optimum system performance
- UTP
- Color coded for easy wire tracing

### Category 5e (350MHz)

Part No.	Description	Color	1	10	100	Part No.	Description	Color	1	10	100
168292EF	3ft. cable RJ45	Gray	\$1.79	\$1.49	\$1.39	201718EF	15ft. cable RJ45	Black	\$5.29	\$4.39	\$3.99
168305EF	7ft. cable RJ45	Gray	2.99	2.59	2.39	201726EF	25ft. cable RJ45	Black	7.99	6.79	6.39
168313EF	15ft. cable RJ45	Gray	5.29	4.39	3.99	201734EF	3ft. cable RJ45	Blue	1.79	1.49	1.39
168321EF	25ft. cable RJ45	Gray	7.99	6.79	6.39	201742EF	7ft. cable RJ45	Blue	2.99	2.59	2.39
201777EF	3ft. cable RJ45	Red	1.79	1.49	1.39	201751EF	15ft. cable RJ45	Blue	5.29	4.39	3.99
201785EF	7ft. cable RJ45	Red	2.99	2.59	2.39	201769EF	25ft. cable RJ45	Blue	7.99	6.79	6.39
201793EF	15ft. cable RJ45	Red	6.95	6.39	5.69	201814EF	3ft. cable RJ45	Yellow	1.79	1.49	1.39
201806EF	25ft. cable RJ45	Red	7.99	6.79	6.39	201822EF	7ft. cable RJ45	Yellow	2.99	2.59	2.39
201697EF	3ft. cable RJ45	Black	1.79	1.49	1.39	201831EF	15ft. cable RJ45	Yellow	5.29	4.39	3.99
201700EF	7ft. cable RJ45	Black	2.99	2.59	2.39	201849EF	25ft. cable RJ45	Yellow	7.99	6.79	6.39

### Category 5 (100MHz)

Part No.	Description	Color	1	10	100	Part No.	Description	Color	1	10	100
175273EF	7ft. cable RJ45	Gray	\$1.49	\$1.35	\$1.25	203051EF	10ft. cable RJ45	Blue	\$1.95	\$1.69	\$1.25
124732EF	7ft. cable RJ45	Red	1.49	1.35	1.25	170190EF	25ft. cable RJ45	Blue	3.55	3.05	2.29

**Blow-out Prices!**

**What is the difference between enhanced category 5e cable rated for 350 MHz and category 6 cable rated for 200 MHz?**

Category 5e cable is specified up to 350 MHz. Cables can be tested up to any frequency that is supported by the test equipment, but such measurements are meaningless without the context of applications and cabling standards. The category 6 standard sets minimum requirements up to 200 MHz for cables, connecting hardware, patch cords, channels and permanent links, and therefore guarantees reasonable performance that can be utilized by applications.

## Modular Plugs



P = No. of positions C = No. of contacts  
W/E = Western Electric type number

\* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	W/E	1	10	100	1000
79290EF	6P4C (RJ11)	623	*	\$ .12	\$ .11	\$ .095
79273EF	6P6C (RJ11)	623	*	.22	.195	.18
79281EF	8P8C (RJ45) (for stranded wire)	641	*	.28	.24	.20
119343EF	8P8C (RJ45) unshielded (for solid wire)	—	.49	.44	.35	.28

## Modular Jacks



- PC mount
- Voltage rating: 150 volts AC max.
- Contact current rating: 1.5 amp max. @ 25°C
- Durability: 750 mating cycles

Part No.	Description	W/E	1	10	100
105945EF	6P4C (RJ11) top flange	623	\$ .62	\$ .52	\$ .45
124038EF	6P6C (RJ11) 6* leads	—	1.25	1.15	.99
115844EF	8P8C (RJ45)	641	.48	.44	.40

## Modular Jacks

### Punchdown Keystone Type

- Removable jacks used in wall plates (clip in)
- CAT 5e classification
- Punchdown type wiring connections with color coding
- Size: 0.57"W x 0.63"H x 1.23"D
- RJ45: 8P8C RJ11: 6P6C



### RJ45

Part No.	Color	1	10	100
195590EF	Red	\$3.59	\$3.39	\$3.19
195602EF	Yellow	3.59	3.39	3.19
195611EF	Green	3.59	3.39	3.19
195629EF	Black	3.59	3.39	3.19
195637EF	Ivory	3.59	3.39	3.19
212951EF	Blue	3.59	3.39	3.19
212943EF	White	3.59	3.39	3.19

### RJ11

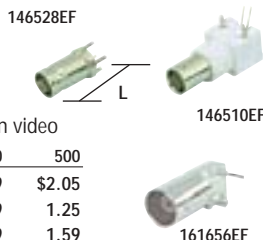
Part No.	Color	1	10	100
213524EF	Black	\$3.59	\$3.39	\$3.19
213516EF	White	3.59	3.39	3.19



## BNC PCB Connectors

- **146528EF:**  
Ideal for applications where multiple insertions require a connector which can endure the stress of high torque
- **146510EF/161656EF:**  
Maintains matching impedance at 50Ω & 75Ω. Ideal for LAN cards & precision video

Part No.	Description	Length (L)	1	10	100	500
146528EF	BNC straight metal	.719" .....	\$2.79	\$2.55	\$2.29	\$2.05
146510EF	BNC right-angle plastic insulation	1.37" <del>\$2.29</del>	1.95	1.75	1.49	1.25
161656EF	BNC right-angle metal	.861" .....	2.29	1.99	1.79	1.59



## Cat 5e Crossover Cable

- 4-pair • 8P8C • UTP • Connect 2 PCs without a hub
- 24AWG (7 x 43) stranded • Strain relief RJ45 connectors

Part No.	Description	1	10	100
169261EF	10' cable RJ45, gray .....	\$6.95	\$6.25	\$5.59



## RJ45 Keystone Wall Plates

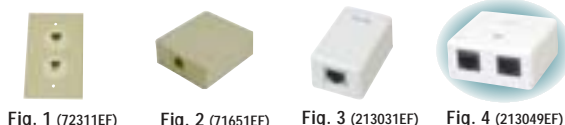
- Color: ivory • Size: 2.8"W x 4.5"H

Part No.	No. of ports	1	10	100
195549EF	1	\$1.25	\$1.15	\$.99
195557EF	2	1.25	1.15	.99
195565EF	3	1.25	1.15	.99
195573EF	4	1.25	1.15	.99



## Modular Jack Boxes & Wall Plate

Add phone lines and network connections with our modular jack boxes and wall plate. Screw down terminals and color coded wires for easy installation and troubleshooting.



Part No.	Description	Fig.	Dimensions (WxHxD)	1	10	100
72311EF	6P6C & 8P8C double wall jack plate w/ jacks (beige)	1	2.8" x 4.5"	\$1.95	\$1.75	\$1.57
103464EF	6P4C adhesive jack RJ11 (beige)	2	2.0" x 2.2" x 0.9"	1.39	1.19	1.09
71984EF	6P6C adhesive jack RJ11 (beige)	2	2.0" x 2.2" x 0.9"	1.39	1.19	.99
71651EF	8P8C adhesive jack RJ45 (beige)	2	2.0" x 2.2" x 0.9"	1.95	1.65	1.45
213031EF	8P8C adhesive jack RJ45(single, white) (CAT 5e)	3	1.5" x 2.4" x 1.1"	3.29	2.99	2.69
213049EF	8P8C adhesive jack RJ45(dual, white) (CAT 5e)	4	2.4" x 2.4" x 1.1"	4.15	3.75	3.39

## Surface Mount Boxes

Category 5 and 5e



- RJ45
- 100MHz
- Size: 2.6"L x 3.2"W x 1.2"H
- CAT 5e (except P/N 176073EF)
- 8P8C

Part No.	Description	1	10	100
176073EF	Single jack (beige)	\$6.95	\$6.25	\$5.59
213022EF	Single jack (white)	6.95	6.25	5.59
176081EF	Dual jack (beige) <del>\$10.99</del>	9.99	8.99	8.09
213014EF	Dual jack (white) <del>\$10.99</del>	9.99	8.99	8.09

## RS-232-to-RJ11/RJ45 Modular Jack Adapters



Change your RS-232 port to a RJ11 or RJ45 modular jack. This will allow you to use modular phone cable rather than RS-232 cable, thus simplifying networking applications. Comes complete with wiring and hardware.

Part Number	Cross Ref. No.	Description	1	10	100
66181EF	G9P6	DB9 M-RJ11(6P6C)	\$2.59	\$2.35	\$2.09
66190EF	G9P8	DB9 M-RJ45(8P8C)	2.89	2.65	2.35
114737EF	G9S4	DB9 F-RJ11(6P4C) <del>\$2.49</del>	1.95	1.79	1.59
66211EF	G9S8	DB9 F-RJ45(8P8C)	2.99	2.69	2.45
66229EF	G25P6	DB25 M-RJ11(6P6C)	2.95	2.35	1.99
66237EF	G25P8	DB25 M-RJ45(8P8C)	2.99	2.69	2.45
204273EF	TMA-105	DB25 F-RJ11(6P4C)	1.95	1.69	1.25
66245EF	G25S6	DB25 F-RJ11(6P6C)	2.59	1.95	1.39
66253EF	G25S8	DB25 F-RJ45(8P8C)	2.89	2.59	2.29

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More networking products on our website.  
Log on today!

## Network Starter Kit

- Single chip controller on PCI network card complies to bus specification 2.1
- Conforms with IEEE standards
- Shielded RJ45 connector on network card
- On-board socket for an optional remote boot ROM
- LED diagnostic to monitor network conditions
- 5-port hub supports 10/100Mbps
- Auto negotiation capability
- Up-link port for expansion

**Includes:** Two each PCI network cards and 15' straight-through cables, 5-port mini hub, 7.5VDC @ 1A wall transformer, 3.5" diskette drivers, and manual

Part No.	Description	1	10
208469EF	Network starter kit .....	\$59.95	\$53.99

## Network Expansion Accessories

Part No.	Description	1	10
168321EF	15' cable RJ45 .....	\$7.99	\$6.79
173606EF	PCI ethernet card .....	14.95	13.49

## 226-Piece Network Connector Kit

Every connector needed to repair a network.

- Size: 10.5"L x 7.0"W x 1.5"H • Weight: 2.5 lbs.

This kit includes:

Quantity	Connector Type
50 pieces (each)	RJ11 solid flat cable (6P4C) RJ11 solid flat cable (4P4C)
25 pieces (each)	RJ11 solid round cable (6P4C) RJ45 solid round cable (8P8C) RJ45 solid flat cable (8P8C)
20 pieces	RJ45 protection caps (assorted colors)
5 (each)	BNC for RG58/U cable BNC for RG59/62/U cable BNC for RG174 cable BNC 50Ω terminator BNC Female-to-female adapter BNC T-adapter male-female-female
1 piece	Storage kit

Part No.	Description	1	10
207079EF	Network connector kit....	\$49.95	\$44.95

## Single-Line Telephone Filter

In-line Z-BLOCKER® filter blocks interference between DSL/HPN, voice and RF from cordless phones. Plugs directly into any standard phone jack and works with any single line phone, fax or dial-up modem.

Part No.	Description	Was	1	10	25
196429EF	Telephone filter <del>\$7.95</del>	\$4.59	\$4.15	\$3.79	

**Gray Flat Ribbon Cable – 28 AWG**

103481EF

- Single edge red stripe for pin 1 orientation
- Insulation: polyvinyl chloride (PVC) • 28 AWG (7 x 36) • Center spacing: 0.05"
- Voltage rating: 300V • Stranded copper wire • Temp. rating: -20°C to +80°C
- Prepackaged and priced in increments of 10', 25', 100' or 500'

Part No.	Cross Ref. No.	Conductors	10 ft.	25 ft.	100 ft.	500 ft.
135538EF	171-10	10 .....	\$1.49	\$3.20	\$11.50	\$47.50
37671EF	171-16	16 .....	2.20	5.00	16.00	70.00
37719EF	171-20	20 .....	1.95	4.50	16.00	65.00
37760EF	171-25	25 .....	3.90	8.75	25.00	110.00
37807EF	171-26	26 .....	3.49	8.00	25.00	120.00
37840EF	171-34	34 .....	4.25	9.25	32.00	120.00
37911EF	171-37	37 .....	5.90	11.75	32.00	125.00
37920EF	171-40	40 .....	7.40	17.50	48.00	215.00
37954EF	171-50	50 .....	6.75	14.50	49.00	210.00
103481EF	171-60	60 .....	8.95	19.75	65.00	285.00

**Multicolor Flat Ribbon Cable – 28 AWG**

- Standard 10-color repeat sequence • 28 AWG (7 x 36)
- Center spacing: 0.05" • Voltage rating: 300V
- Temp. rating: -20°C to +80°C • Stranded copper wire
- Prepackaged and priced in increments of 10', 25', 100' or 500'

Part No.	Cross Ref. No.	Conductors	10 ft.	25 ft.	100 ft.	500 ft.
112547EF	28RC10	10 .....	\$1.95	\$4.50	\$17.50	\$70.00
105671EF	28RC16	16 .....	3.25	7.25	24.00	100.00
105689EF	28RC20	20 .....	3.95	9.00	30.00	125.00
105697EF	28RC25	25 .....	6.29	14.25	49.95	219.95
105700EF	28RC34	34 .....	6.50	13.00	43.00	195.00
105726EF	28RC40	40 .....	8.69	19.553	69.49	299.95
105718EF	28RC50	50 .....	10.95	24.95	85.95	384.95

**Solid Hook-Up Wire – 22 AWG**

- Temp. range: -55°C to +105°C • Passes UL VW-1 flame test
- MIL-W-16878D type B • Wt.: 100' (0.3 lbs.); 1000' (3.8 lbs.)
- For use with breadboards such as the JE20 series, pg 49

Part No.	Cross Ref. No.	Color	100 ft.	Part No.	Cross Ref. No.	Color	1000 ft.
36767EF	122BE/C	Blue	\$4.49	36775EF	122BE/K	Blue	\$29.95
36791EF	122BK/C	Black	4.49	36804EF	122BK/K	Black	35.95
36821EF	122G/C	Green	4.49	36839EF	122G/K	Green	29.95
36855EF	122R/C	Red	4.49	36863EF	122R/K	Red	39.99
36880EF	122W/C	White	4.49	36898EF	122W/K	White	39.99
36919EF	122Y/C	Yellow	4.49	36927EF	122Y/K	Yellow	29.95

**Modular Telephone Cable – 28 AWG**

- Color coded conductors • Flat modular cable
- PVC jacket • Gray • 7 x 43 stranded

Part No.	Cross Ref. No.	Conductors	100 ft.	1000 ft.	10000 ft.
103430EF	MTC4	4 .....	\$3.30	\$30.00	\$250.00
103448EF	MTC6	6 .....	7.00	50.00	430.00
103450EF	MTC8	8 .....	10.00	62.00	450.00

**2-Conductor Stranded Power/Spaker Cable – 24 AWG**

- Black wire with white polarity stripe
- Temperature rating: 20°C to 60°C
- Stranded copper wire (7 x 32) • Operating voltage: 300V

Part No.	Cross Ref. No.	Wt. (lbs.)	100 ft.	Part No.	Cross Ref. No.	Wt. (lbs.)	1000 ft.
100280EF	224BK/C	0.8	\$5.59	100298EF	224BK/K	7.8	\$39.95

**RG Type Bulk Coaxial Cable**

RG58/U & RG58A/U (50Ω): Nom. cap.: 27pF/ft.; center resist.: 10.4Ω/1kft. @ 77°F  
 RG59/U (75Ω): Nominal capacitance: 19pF/ft.; center resist.: 16.5Ω/kft. @ 77°F  
 RG174/U (50Ω): Nominal capacitance: 30.8pF/ft.; center resist.: 97Ω/kft. @ 77°F

- Prepackaged and priced in increments of 100' or 1000'

Part No.	Cross Ref. No.	Description	100 ft.	1000 ft.
102226EF	RG58/U	For ethernet, oscilloscopes (solid 20AWG) .....	\$12.00	\$96.00
116898EF	RG58A/U	For ethernet, oscilloscopes (stranded 20AWG) .....	19.00	150.00
102218EF	RG59/U	For CATV & video patch cords (solid 22AWG) .....	13.00	110.00
112037EF	RG174/U	For ethernet, oscilloscopes (stranded 26AWG) .....	19.00	169.00

**Category 5 Network Cable**

- 100MHz • 8C • 4 twisted pairs • UTP
- Insulation: polyethylene • Nom. OD.: 189"
- Nom. impedance: 100Ω

Solid: uses modular plug P/N 119343EF, pg 82

Stranded: uses modular plug P/N 79281EF, pg 82

- Prepackaged and priced in increments of 25' or 100'

**24 AWG UTP Category 5 Enhanced – 350MHz**

Part No.	Description	25 ft.	100 ft.	1000 ft.
176225EF	Solid (gray) .....	\$5.00	\$17.00	\$100.00
201603EF	Stranded (blue) .....	5.00	14.00	90.00
176233EF	Stranded (gray) .....	6.00	21.00	180.00
201574EF	Stranded (red) .....	6.00	18.00	160.00
201582EF	Stranded (blue) .....	6.00	18.00	160.00

**24 AWG UTP Category 5 – 100MHz**

Part No.	Description	25 ft.	100 ft.	1000 ft.
118113EF	Solid (gray) .....	\$4.59	\$16.49	\$129.50
118130EF	Stranded (gray) (7/32 AWG) .....	5.95	19.35	164.50
201646EF	Stranded (gray) (7/32 AWG) .....	5.50	15.00	140.00

**Multiconductor Shielded Computer Communication Cable – 24 AWG**

- Stranded copper wire, multi-colored insulation
- Insulated with polyvinyl chloride (PVC)
- Voltage rating: 300V • Color: gray • Drain wire
- 24 AWG (7 x 32 AWG) • Shielded 100% w/ aluminum mylar
- Prepackaged and priced in increments of 25' or 100'

Part No.	Cross Ref. No.	Conductors	Diameter	25 ft.	100 ft.	1000 ft.
31860EF	SC4	4	0.20" .....	\$4.75	\$17.00	\$140.00
31878EF	SC9	9	0.23" .....	11.25	35.00	270.00
31843EF	SC15	15	0.28" .....	14.75	49.00	430.00
31851EF	SC25	25	0.37" .....	22.25	71.00	590.00

**Stranded Hook-Up Wire – 20/22 AWG**

300 Volts

- 80°C • PVC insulation • CSA: TR-64 • UL style: 1007
- Temperature range: -40°C to +80°C • Sold in 100' rolls

Part No.	Cross Ref. No.	AWG	Strands (No. x AWG)	Color	Wt. (lbs.)	1	10
126084EF	223SBK/C	22	7 x 30	Black	0.4	\$3.39	\$2.99
126033EF	223SR/C	22	7 x 30	Red	0.4	3.39	2.99
126076EF	223SW/C	22	7 x 30	White	0.4	3.39	2.99
125840EF	203SBK/C	20	10 x 30	Black	0.6	4.95	4.49
125794EF	203SR/C	20	10 x 30	Red	0.5	4.95	4.49
125831EF	203SW/C	20	10 x 30	White	0.5	4.95	4.49

**Twisted Pair Cable – 24 AWG**

- PVC insulation • Use for hook up wire • Stranded tinned wire (7 x 32)
- Reduced EMI • Wt.: 100' (0.5 lbs.); 1000' (4.7 lbs.) • 80°C • 300 V

Part No.	Cross Ref. No.	Color	100 ft.	Part No.	Cross Ref. No.	Color	1000 ft.
105911EF	224GW/C	Green/white .....	\$5.49	105806EF	224GW/K	Green/white ..	\$44.95
173147EF	224RW/C	Red/white .....	5.49	173155EF	224RW/K	Red/white .....	44.95
173163EF	224BW/C	Black/white .....	5.49	173171EF	224BW/K	Black/white .....	44.95

**Kynar™ Wire Wrap Wire – 30 AWG**

- Assorted color coded insulation
- Color coded Kynar™ (Polyvinidene Fluoride) insulation
- Silver plated copper (solid conductor) • UL 1423
- Temperature: -40°C to +125°C
- Wire wrap tools, see web • Passes UL VW-1 flame test

Part No.	Color	Wt. (lbs.)	100 ft.	Part No.	Color	Wt. (lbs.)	1000 ft.
22541EF	Blue	0.1	\$4.95	22550EF	Blue	0.6	\$29.95
22576EF	Black	0.1	4.95	22584EF	Black	0.6	29.95
22630EF	Red	0.1	4.95	22648EF	Red	0.6	29.95
22664EF	White	0.1	4.95	22672EF	White	0.6	29.95
22605EF	Green	0.1	4.95	22613CF	Green	0.6	29.95
22699EF	Yellow	0.1	4.95	22701CF	Yellow	0.6	\$29.95 26.95

## Digital Audio Optical Cables and Adapters

Connect your DVD, CD, Mini Disc, DAT, game console or other digital audio equipment for clear, full and richly detailed sound. For the ultimate listening experience, connect to your Dolby Digital® or DTS® home theater equipment. These cost effective performance TOSLINK type cables give you the cleanest possible signal, even at extreme volume levels for today's audio and home theater applications. They are manufactured with high-quality P.M.M.A. optical fiber with a highly polished lens. The durable connectors ensure long lasting, corrosion-free connections. The stylish PVC jacket adds flexibility and durability for years of listening pleasure. True digital signal is maintained by a low-loss core and inner clad provide low distortion, high signal-to-noise ratio, and high fidelity.

- Low-loss core provides low distortion and high signal-to-noise ratio
- Clad reflecting layer prevents phase error and noise, achieving high-fidelity transmission effect
- Corrosion-resistant, precise collar to ensure long lasting quality
- Non-slip rubber grip connector provides for easy installation
- Ultra flexible PVC jacket makes installation, even in hard to reach areas a snap

### Cables

Part No.	Description	1	2	5
228654EF	3' TOSLINK-TOSLINK .....	\$3.79	\$3.35	\$2.85
228689EF	3' TOSLINK-mini plug .....	9.95	8.95	7.95
228662EF	6' TOSLINK-TOSLINK .....	4.75	4.29	3.79
228697EF	6' TOSLINK-mini plug .....	16.65	14.99	13.49
228671EF	12' TOSLINK-TOSLINK .....	7.29	6.59	5.95
228700EF	12' TOSLINK-mini plug .....	23.29	20.95	18.85

### Adapters

230615EF	TOSLINK - mini plug adapter .....	\$2.79	\$2.59	\$2.49
230607EF	TOSLINK - TOSLINK coupler .....	1.89	1.79	1.69



## Component Video and Audio Cables

Component video cables connect the latest video equipment like DVD players equipped with component video output jacks to LCD or plasma televisions, projectors and other component video devices. By using component video cables, you bypass the TV's Y/C separator and color decoder, routing the color (Y Pr Pb) information directly into the TV's matrix decoder. By sending the pure DVD component signal directly to a component video input-equipped display device, the DVD signal forgoes the extra processing that normally would degrade the image. The result is a vastly increased image quality, with incredibly lifelike colors and crisp detail. Python™ component video cables provide you maximum picture and sound quality compared to ordinary "out of the box" cables. This cable offers high quality vivid detail and color for today's video and home theater applications.

- Low-loss 75Ω oxygen-free copper center conductors and foam dielectric provide maximum signal transfer bandwidth for improved picture quality and performance
- Corrosion resistant, precise 24k gold-plated connectors ensure long lasting quality
- Fully molded color coded connectors attached to an ultra-flexible PVC jacket provides excellent strain relief, easy installation, and identification
- 100%, .012mm aluminum-polyester foil shielding and spiral-wound copper-braid shielding provides clear, noise-free, vivid picture quality
- Bonded construction design for neat, easy connection of component video and audio

Part No.	Description	1	2	5
228620EF	6' component video RGB cable .....	\$12.35	\$11.15	\$9.99
228638EF	12' component video RGB cable .....	23.75	21.39	19.25
228646EF	25' component video RGB cable .....	33.95	30.59	27.49
229403EF	6' component video RGB and stereo audio cable ....	17.29	15.59	13.99
229411EF	12' component video RGB and stereo audio cable ..	33.25	29.95	26.95
229420EF	25' component video RGB and stereo audio cable ..	47.55	42.79	38.55



## Audio/Video Adapters and Cables

### RCA Audio Adapters and Y-Cable

Part No.	Description	1	10	25	100
228283EF	RCA female jack to mono 1/4" male plug .....	\$ .99	\$ .89	\$ .69	\$ .55
228312EF	RCA male plug to 1/4" mono female jack .....	1.25	1.10	.79	.69
228267EF	RCA female to female jack coupler, gold plated.....	.95	.79	.55	.45
159441EF	RCA female to female jack coupler.....	1.15	.99	.75	.65
228259EF	RCA male to male plug adapter .....	1.59	1.25	.99	.85
228339EF	RCA F jack to 3.5mm mono M plug, gold plated .....	1.49	1.29	1.09	.90
228291EF	RCA F jack to 3.5mm mono M plug, nickel plated .....	1.25	1.09	.89	.75
215458EF	RCA male plug to 3.5mm mono female jack .....	.89	.75	.69	.59
196808EF	5' Y-cable 1/8" stereo F jack to (2) RCA M plugs.....	.75	.65	.59	.53
139037EF	5' Y-cable 1/8" stereo M plug to (2) RCA M plugs.....	2.25	1.99	1.79	1.61
228401EF	6' Y-cable (2) RCA M plugs to 3.5mm stereo M plug .....	1.55	1.39	1.25	1.13
228371EF	6' Y-cable (2) RCA M plugs to RCA F jack .....	.99	.89	.80	.72
228355EF	6' Y-cable RCA M plug to (2) RCA F jacks .....	1.15	.99	.85	.79
228380EF	6' Y-cable (2) RCA F jacks to 3.5mm stereo plug.....	1.65	1.35	1.25	1.19
215466EF	8' Y-cable RCA M plug to (2) RCA M plugs.....	1.89	1.69	1.53	1.38

### 3.5mm Audio Adapters and Y-Cable

228275EF	3.5mm stereo female to female jack .....	\$ .55	\$ .49	\$ .44	\$ .365
215440EF	3.5mm mono female jack to 1/4" mono male plug .....	.45	.39	.35	.32
196082EF	3.5mm stereo female jack to 1/4" stereo male plug .....	.59	.49	.31	.28
228321EF	3.5mm mono M plug to 1/4" stereo F jack .....	1.39	1.15	.99	.75
228304EF	3.5mm stereo M plug to (2) 1/4" stereo F jacks .....	2.05	1.85	1.25	1.15
228339EF	3.5mm mono M plug to RCA F jack, gold plated .....	1.49	1.29	1.09	.90
228291EF	3.5mm mono M plug to RCA F jack, nickel plated .....	1.25	1.09	.89	.75
215458EF	3.5mm mono female jack to RCA male plug .....	.89	.75	.69	.59
196808EF	5' Y-cable 1/8" stereo F jack to (2) RCA M plugs.....	.75	.65	.59	.53
139037EF	5' Y-cable 1/8" stereo M plug to (2) RCA M plugs.....	2.25	1.99	1.79	1.61
228398EF	6' Y-cable (2) 3.5mm stereo female jacks to 3.5mm stereo male plugs .....	1.95	1.65	1.35	1.25
228401EF	6' Y-cable (2) RCA M plugs to 3.5mm stereo M plug .....	1.55	1.39	1.25	1.13
228380EF	6' Y-cable (2) RCA F jacks to 3.5mm stereo plug .....	1.65	1.35	1.25	1.19



Audio/video Adapters and Cables are continued on next page.



## Audio/Video Adapters and Cables

NEW



## Video/Audio Patch Cables

Part No.	Description	1	10	25
228216EF	3' stereo video patch cable, gold plated	\$1.19	\$1.13	\$1.07
228574EF	25' stereo video patch cable, gold plated	6.99	6.29	5.65
228582EF	50' stereo video patch cable, gold plated	12.59	11.35	10.19

## VCR Cable

Part No.	Description	1	10	25
228224EF	6' stereo VCR cable	\$2.39	\$2.29	\$2.15

## S-VHS Cables

Low-loss fully shielded Super-VHS cables, 4-contact mini DIN plus S-VHS cable and dual-RCA plug stereo cables.

- Fully-molded color coded gold RCA connectors
- Flexible black PVC jacket
- Applications: home theaters, DSS receivers, Super-VHS VCRs, camcorders, and DVD players

228558EF/228566EF: 95% spiral wound shield S-VHS/audio conductors

Part No.	Description	1	10	25
228591EF	6' S-VHS cable, gold plated	\$2.15	\$1.95	\$1.79
228558EF	6' S-VHS audio-video cable, gold plated	12.95	11.65	10.49
228566EF	12' S-VHS audio-video cable, gold plated	14.95	13.45	12.15
228603EF	12' S-VHS cable, gold plated	2.65	2.35	2.10
228611EF	25' S-VHS cable, gold plated	4.05	3.85	3.65

## RCA Plugs

- High-quality plastic and metal housing RCA plugs

Gold plated metal housing with spring strain relief for 6.7mm cables

Part No.	Description	1	10	25	100
229876EF	Black	\$1.89	\$1.69	\$1.55	\$1.39
229868EF	Red	1.89	1.69	1.55	1.39
229884EF	White	1.89	1.69	1.55	1.39
230287EF	Yellow	1.89	1.69	1.55	1.39

## Plastic screw on cover w/ integral cable protection

Part No.	Description	1	10	25	100
229921EF	Black (5 pk)	\$1.15	\$1.05	.91	.85
229930EF	Red (5 pk)	1.15	1.05	.91	.85
229913EF	White (5 pk)	1.19	1.09	.95	.89
229892EF	Yellow (5 pk)	1.19	1.09	.95	.89

## Video Adapters

Part No.	Description	1	10	25
229809EF	S-video 4-pin mini DIN female to female jack	\$2.85	\$2.59	\$2.29
229391EF	S-video male plug to RCA video female jack	5.39	4.85	4.39

## RCA Cables

Part No.	Description	1	10	25
215474EF	3' RCA male plug - female jack (gray)	\$1.15	\$ .99	\$ .89
228443EF	3' stereo RCA (2) male to (2) male plugs, gold plated	1.49	1.39	1.29
183311EF	4' RCA male to male plug (black)	.99	.89	.79
206973EF	4' RCA male to male plug (yellow)	.99	.89	.79
183302EF	4' RCA (2) male to (2) male plugs (red/black)	1.75	1.45	1.35
106374EF	6' RCA male to male plug	1.19	.98	.91
228419EF	6' mono RCA male plug to female jack	1.65	1.45	1.25
228486EF	6' RCA stereo (2) male plugs to (2) female jacks	1.25	1.15	1.05
228451EF	6' RCA stereo (2) male to (2) male plugs, gold plated	1.79	1.69	1.59
177527EF	6' RCA (3) male to (3) male plugs	1.89	1.75	1.55
184882EF	6' RCA (3) male to (3) male plugs, low loss	1.95	1.79	1.59
228427EF	10' RCA female jack to male plug	2.35	1.95	1.79
29348EF	10' RCA male to male plug (yellow)	1.69	1.49	1.39
228460EF	12' RCA stereo (2) male to (2) male plugs, gold plated	2.10	1.89	1.75
225980EF	12' RCA (3) male to (2) male plugs, gold plated	4.49	3.99	3.65
225998EF	20' RCA (3) male to (2) male plugs, gold plated	7.99	7.19	6.45
228435EF	25' mono RCA male to male plug, nickel plated	2.19	2.09	1.99
228478EF	25' RCA stereo (2) male to (2) male plugs, gold plated	2.39	2.29	2.19

## 3.5mm Audio Patch Cables

Part No.	Description	1	10	25
228494EF	6' 3.5mm stereo male to male plug	\$1.39	\$1.19	\$ .99
228515EF	6' 3.5mm stereo male plug to female jack	1.49	1.35	1.25
228507EF	12' 3.5mm stereo male to male plug	1.69	1.49	1.29
228523EF	12' 3.5mm stereo male plug to female jack	1.65	1.49	1.35

## 3.5mm Female Jacks and Male Plugs



- Threaded screw on housing
- 1mm diameter solder eyelets
- Shield crimp tabs

231159EF/231167EF: With spring strain relief

Part No.	Mfr. Cross Ref. No.	Description	1	10	100	1000
109495EF	PJ035PM	Mono female jack 3.5mm hole size	\$.45	\$.40	\$.36	\$.32
165729EF	PJ0354	Mono female jack 3.5mm hole size	.69	.59	.49	.39
101151EF	PJ1035	Mono male plug, plastic	.69	.62	.55	.49
147344EF	PJ1035L	Mono male plug, plastic	.59	.53	.48	.43
231159EF	AP-336	Mono male plug, metal	1.25	1.19	1.09	.95
231175EF	AP-340	Stereo male plug, plastic	.45	.41	.35	.27
231167EF	AP-343	Stereo male plug, metal	1.79	1.60	1.45	1.30

## RCA Jacks

- Standard RCA jacks for audio and video signals

Part No.	Description	Color	1	10	100	1000
220581EF	.44"W x .56"D x .48"H	White	\$.45	\$.31	\$.28	\$.22
220556EF	.44"W x .56"D x .48"H	Red	.45	.31	.28	.22
220572EF	.44"W x .56"D x .48"H	Black	.45	.31	.28	.22
220564EF	.44"W x .56"D x .48"H	Yellow	.45	.31	.28	.22
112475EF	.44"W x .58"D x .48"H	Red	.39	.35	.31	.19
169501EF	.40"W x .85"D x .50"H	Black	.39	.35	.31	.23
159484EF	.84"W x .38"H	Black	.49	.39	.33	.24
172339EF	.84"W x .38"H	Red	.49	.39	.31	.23



## Jameco's Low-Price Guarantee

We'll match the advertised price of any like product. It's that simple!

## VHF High-Band Wireless Microphones

The perfect microphone for use with portable PA systems, video recording, and stage use. There is no cord to restrict your movements.

- T.H.D. (total harmonic distortion): less than 0.5% for crystal-clear sound
- Frequency stability:  $\pm 0.005\%$  with Quartz controlled
- Maximum deviation range:  $\pm 15\text{kHz}$  with limiting compressor
- Carrier frequency range: 100Hz to 15kHz
- S/N ratio: over 180dB @ 15kHz deviation
- Transmission range: 300m

**Includes:** 0.25" mono jack patch cable, 9V battery and power supply

Part No.	Mfr. Cross Ref. No.	Weight (lbs.)	1	5
198221EF	WR202H	2.3	\$89.69	\$81.59

## RG Type Bulk Coaxial Cable

**RG58/U & RG58A/U (50 $\Omega$ ):** Nominal cap.: 27pF/ft.; center resist.: 10.4 $\Omega$ /kft. @ 77°F  
**RG59/U (75 $\Omega$ ):** Nominal capacitance: 19pF/ft.; center resist.: 16.5 $\Omega$ /kft. @ 77°F  
**RG174/U (50 $\Omega$ ):** Nominal capacitance: 30.8pF/ft.; center resist.: 97 $\Omega$ /kft. @ 77°F

- Prepackaged and priced in increments of 100' or 1000'

Part Number	Mfr. Cross Ref. No.	Description	100 ft.	1000 ft.
116788EF	RG58A/U	For ethernet, oscilloscopes (stranded 20AWG)	\$19.00	\$150.00
112037EF	RG174/U	For ethernet, oscilloscopes (stranded 26AWG)	19.00	169.00

## BNC/RCA Adapters

- Convert existing cabling systems to more readily available parts for expansion, replacement or upgrade

Part No.	Description	1	10	100	500
114788EF	RCA female to BNC male adapter	\$1.35	\$1.05	\$ .99	\$ .98
114753EF	RCA male to BNC female adapter	1.59	1.45	1.29	1.19
114770EF	BNC female to "F" connector male adapter	1.79	1.59	1.39	1.19

## 0.2"-Pitch Power Connectors and Pins

**Connector & Housing Specifications:**

- Voltage rating: 250VAC (Mate-N-Lock 600VAC)
- Operating temperature: -55°C to +105°C

**Crimp Pin Specifications:**

- Material: tin plated brass
- Current rating: 1.5 amps
- Wire size range: 18-24 AWG
- Use crimp tool P/N 99442EF, pg 55

**For 5.25" Disk Drives and Power Supplies**

**42075EF & 42067EF Connector Housings:**

- Keyed mating connectors
- External key bar indicates pin 1

42729EF (Male for 42075EF)	109145EF	117567EF
42649EF (Female for 42067EF)	42075EF (Male)	42067EF (Female)

- See website for extraction tools, P/N 131887EF & 131879EF

Part No.	Description	10	100	1000
109145EF	4-pin M vert. PCB mtg	\$ .59	\$ .49	\$ .31
117567EF	4-pin M PCB mounting, horizontal edge mount	.63	.55	.49
42075EF	4-pin M housing	.12	.11	.10
42067EF	4-pin F housing	.20	.15	.13
42729EF	M crimp pin for 42075EF	.10	.07	.06
42649EF	F crimp pin for 42067EF	.10	.07	.06

**45 More @ [www.Jameco.com](http://www.Jameco.com)**

See our website for more BNC and SMA Adapters.

## SMA Connectors



- Application: cellular phone, data communication, instrumentation and video
- 50 $\Omega$  impedance
- Plating gold except 153285EF: plating nickel
- Frequency range: 0-18GHz
- Temperature range: -65°C to 165°C

153365EF: Cable type: RG-174 153285EF: Cable type: RG-58/174

Part No.	Description	1	10	50	100
153365EF	SMA 50 $\Omega$ crimp type male plug connector	\$4.39	\$3.95	\$3.55	\$3.19
145381EF	SMA straight female PCB mount connector, 4 legs	5.25	4.75	4.25	3.49
153285EF	SMA bulkhead solder female w/ washer, rear mount	3.49	3.15	2.85	2.59
160021EF	Panel mount feed thru connector female - female	4.99	4.49	3.99	3.49
188509EF	SMA PCB straight jack	3.69	3.35	2.99	2.69
188525EF	SMA PCB right angle jack	5.95	4.95	3.79	3.35

## BNC Coax Connectors

BNC connectors are miniature, lightweight units designed to operate up to 11GHz and typically yield low reflection up to 4GHz

Part No.	Fig.	Description	1	10	100	500
71482EF	1	BNC male with pin and ferrule (RG58)	\$1.65	\$1.49	\$1.35	\$1.25
112109EF	1	BNC male with pin and ferrule (RG174)	1.59	1.45	1.29	1.15
71589EF	2	BNC female panel mount (UG-1094A)	1.49	1.35	1.25	1.09
111561EF	3	BNC female isolated bulkhead	2.29	1.99	1.79	1.59

## 0.098"-Pitch AT Power Connectors for Motherboards & Power Supplies

- Voltage rating: 250V AC/DC
- Current rating: 7A AC/DC
- Temperature range: -25°C to 85°C
- Insulation resistance: 1000M $\Omega$  minimum
- Withstanding voltage: 1500V/min.

**78300EF: AMP60G male 6-pin PCB mount connector**

- Material of post: tin-plated brass
- Diameter of post: .09"

**78326EF: AMP50G female 6-pin housing connector** • Material: nylon

**78318EF: AMP501T terminal pin**

- Material: tin-plated brass



\* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	L	W	H	Dia	Use With	1	10	100	1000
78300EF	6-pin male connector	.93"	.37"	.57"	—	—	\$ .45	\$ .39	\$ .35	\$ .31
78326EF	6-pin housing connector	.94"	.25"	.74"	—	78300EF	.35	.31	.28	.25
78318EF	Power terminal pin, female	.69"	—	—	.09"	78326EF	*	.11	.08	.07

## BNC Coax Male Connectors

BNC connectors are miniature, lightweight units designed to operate up to 11GHz and typically yield low reflection up to 4GHz.

**SALE**

**BNC with Pin and Ferrule**

Part No.	Description	1	10	100	500
135618EF	RG6	\$ .89	\$ .69	\$ .45	\$ .39
71482EF	RG58	1.65	1.49	1.35	1.25
71271EF	RG59/62	1.39	1.25	.99	.75
112109EF	RG174	1.59	1.45	1.29	1.15

## SMA/SMB 50 $\Omega$ Coax Cables

- SMA male to SMA male

Part No.	Cable	Length (ft.)	1	10	50
163854EF	RG174	1	\$4.49	\$3.95	\$3.39
153381EF	RG174	2	4.95	4.29	3.39
153390EF	RG174	4	5.49	4.75	4.29
159450EF	RG174	6	6.79	6.15	5.55

## BNC Coax Cables



**RG58/U 50 $\Omega$  Cables**

- For Ethernet networks, oscilloscopes

Part Number	Mfr. Cross Ref. No.	Lgth (ft.)	1	10	50	100
11404EF	CRG58-3	3	\$4.29	\$3.89	\$3.49	\$3.15
102331EF	CRG58-6	6	4.39	3.99	3.59	3.19
180822EF	CRG58-10	10	4.49	3.59	2.69	1.89
169818EF	CRG58-15	15	5.49	4.95	3.95	2.95
102365EF	CRG58-50	50	9.49	8.55	7.69	6.89

**RG174/U 50 $\Omega$  Cables**

- For Ethernet networks, oscilloscopes

Part Number	Mfr. Cross Ref. No.	Lgth (ft.)	1	10	50	100
111472EF	RG174U3	3	\$3.85	\$3.49	\$3.15	\$2.85
111481EF	RG174U6	6	4.59	4.15	3.75	3.35



13.5"

18.5"



Includes spare covers  
for the detachable  
speakers, plus  
a handy remote.



Just 3.5"  
deep!

## Wall-mountable stereo boasts big sound, sleek lines, and zero footprint!

*This handsome, all-in-one multimedia stereo creates a "true wall of sound" in your home or office.*

Short on space, but long on taste? This elegantly designed Sanyo stereo system fulfills your audio and aesthetic dreams. You get a stereo amplifier, CD player, cassette deck, digital AM/FM tuner, alarm clock, and two high-quality speakers sculpted into an elegantly sleek work of art.

Mount the entire system on the wall for a zero-footprint solution to tight space. Leave the speakers attached, or place them up to

12 feet apart for stereo separation. The 2.5 watt-per-channel output easily fills any bedroom, living room, kitchen, bath or office cubicle with rich sound. The large backlit display and 20-key remote-control provides control of the entire system from the comfort of your bed or sofa. Preset as many as 20 FM and 10 AM stations. Wake to your favorite radio program, CD or tape. Includes base/treble control and headphone jack.

Part No.	Description	Price
211318EF	Sanyo Slim-Profile Zero Footprint Stereo .....	\$139.95



## See only the controls you need, for each of 8 separate devices!

*All remotes change channels, but this one changes itself!*

The Kameleon 8 revolutionizes remote control as it simplifies your leisure life. Forget the maze of confusing buttons and complicated keystrokes that make some universal remotes a burden. With a touch, this unique controller transforms itself into the perfect remote for each of your components. For example, choose to control your DVD player, and the cool backlit Kameleon 8 display shows only DVD controls. And it offers the same easy, crystal-clear functionality for up to 8 devices.

Pre-programmed with the world's largest code library, this super remote even guides you interactively through its quick and painless set-up routine. Whatever your remote control needs, the Kameleon 8 will be a change for the better.

Part No.	Description	Price
235521EF	Kameleon 8™ Universal Remote Control .....	\$99.95

## Protecting yourself from cell phone radiation with a headset? Think again!

Concerned about the risks of cell phone radiation? Then you should know this: ordinary headsets don't protect you. In fact, ordinary headsets deliver electromagnetic radiation to your head through the electrical wire they use to conduct sound. If you want real protection from cell phone EMR, you want RadFree. Instead of electrical wire, RadFree Airwave technology uses a non-conducting acoustical chamber and tube to deliver crystal

clear sound to your ear. Just speak naturally into the microphone, which includes a mute button. You can move your radiation-emitting phone up to 4 feet away from your head, reducing your exposure to cell phone radiation by 98%.

Part No.	Description	Price
227168EF	RadFree Airwave 2.5mm Headset ....	\$29.95
227109EF	RadFree Airwave for Nokia Phones .....	\$29.95



## Rock'n'Roll in peace! This headset stifles the racket outside!

*Collapsible, comfortable, portable and packable; this noise-canceling headset from Sennheiser.*

This folding headset from Sennheiser brilliantly reproduces the sounds you want to hear while muting stressful environmental noise. Use as headphone replacements and you'll actually hear your music over background noises. Use alone and block out background noise while still carrying on a conversation! It works on a simple principle of physics: sound is canceled by anti-sound that's phase-shifted through 180°. Just flip the switch on the NoiseGard™ console, and grating sounds like traffic, airplanes and urban warfare are instantly hushed by up to 15 dB. Perfect for travel, they fold compactly and slip into a dual compartment padded belt pouch that's roomy enough for both the headset and portable electronics. Headphone freq. resp.: 10-21,000Hz. Impedance 300 Ohm. Total Harmonic Distortion: 0.1%. Sound pressure level: 106 dB(SPL). 2 AA batteries included. 2-year manufacturer's warranty.



*Folds to fit into included carrying case.*

Part No.	Description	Price
227088EF	Noise Canceling Headset .....	\$149.95

*Don't settle for a false sense of security. Unlike regular headsets, RadFree reduces your exposure to cellphone radiation by 98%.*



*8 different ear pieces included to assure the perfect fit.*





XM Satellite Base Receiver #226157EF

Just  
1.5"  
thick!

"...XM Radio is a service I can wholeheartedly recommend."  
—Walter Mossberg, The Wall Street Journal



SKYFi Portable Audio  
Docking System  
#226165EF

## Pocket satellite radio with 100 crystal clear channels that follow you everywhere; many commercial free!

Imagine being able to choose from 100 channels of music, broadcast news, sports and talk radio...and taking them everywhere you go. With the Delphi XM SKYFi Satellite Radio system and a subscription to XM Satellite Radio\*, you'll enjoy 100 channels of entertainment, 35 of them commercial-free, anytime, anywhere.

### What do I need?

With this ingenious, modular system, the "brains" are contained in a palm-sized wireless base receiver small enough to slip into your pocket (#226157EF). Just buy one base receiver and use it in any docking station, wherever the location. Plug the Home Dock into the audio input jacks of your home or office stereo. Insert the Vehicle Dock into your car's cassette player; or use the FM Modulator Kit for a wireless car installation. For even more portability, get the self-contained Boom Box/Dock, and you can take your favorite sounds to the beach, the boat, or even up in an airplane. Boom Box/Dock features two dual-cone speakers, headphone jack, integrated carrying handle, and detachable hi-gain antenna with 20' cable. Powered by AC adapter (included) or 6 D-cell batteries (not included).

### Just slip the receiver into a dock...

...and 100 crisp, clear satellite stations, including up to 20 of your favorite presets, are yours at the touch of a button. The receiver's 5-line electric-orange display shows the currently playing song, artist, and more. You can even see what's playing on other channels before

you switch. Narrow your search by category for fast navigation. Or use the jog-wheel to scroll through all the channels. Includes remote for the ultimate in home or office listening.

**The XM Satellite Radio Broadcast System's** signal is beamed from two huge earth-station antennas to its broadcast satellites 22,000 miles above the earth. Ground antennas, or repeaters, boost the signal around geographical and architectural obstacles. In fact, the quality of



Dock it in your home.



Dock it in your car.

the XM signal is so good, Popular Science rated it "superb, with good dynamics, crisp frequency response and virtually inaudible distortion."

Non-commercial programming for XM Radio is produced at the company's 150,000 square foot broadcast centers in Washington DC, Nashville, and Manhattan. The facilities include 82 studios, 20 production suites, 310 audio workstations and an unsurpassed library of digital recordings.

Part No.	Description	Price
<b>226157EF:</b>	<b>Radio Base Receiver &amp; Remote</b>	<b>\$129.99</b>
4-11/16"W x 1-1/2"D x 2-15/16"H. Requires your choice of docking stations to produce sound.		
<b>226181EF:</b>	<b>Home Docking Kit</b> .....	<b>\$69.99</b>
Includes dock, AC power cord, antenna, and audio cable with twin RCA output jacks.		
<b>226165EF:</b>	<b>SKYFi Docking System</b> .....	<b>\$99.99</b>
Includes boom box dock with two speakers, headphone jack, detachable hi-gain antenna and cable, and AC adapter.		
<b>226173EF:</b>	<b>Vehicle Docking Kit</b> .....	<b>\$69.99</b>
Works with any vehicle FM stereo system with a cassette player. Includes dock, magnetic roof antenna, universal mounting bracket, and cigarette lighter power adapter.		
<b>226190EF:</b>	<b>Vehicle FM Modulator</b> .....	<b>\$49.99</b>
For a more professional-looking auto installation or those without a vehicle cassette player. Replaces cassette adapter and cigarette lighter adapter for a "wireless" look.		
<b>226202EF:</b>	<b>Antenna Extension Kit</b> .....	<b>\$39.99</b>
For improved reception with the Home Docking Kit		

\* XM Radio subscription currently priced at \$9.95/mo. Sign up via the Web or by calling toll-free once you activate your new receiver. Receive complete audio instructions via the receiver. Receiver produces sound only with a docking station.

## CD Laser Lens Cleaner

**NEW**



- 6-language voice guide instructions
- Single brush wet-dry cleaner
- Removes accumulated oils, dust, and debris from CD optical lens

Part No.	Description	Price
<b>228531EF</b>	CD Laser Lens Cleaner .....	<b>\$9.99</b>

## Keep this headset on & listen to FM radio in-between calls.

Using your phone all day long? Here's a headset you can keep wearing between calls...because as soon as you hang up the phone, it entertains you with your favorite FM radio station. Great at sporting events! A lightweight clip-on module puts the simple controls at your fingertips. There's no tuner dial to distract you. Push the scan button to advance to the next clearstation—no irritating

static in-between. When the phone rings, touch one button to answer the call. Touch it again to end the call. No need to mute the FM—it switches on and off automatically. A high-low switch adjusts the volume for both functions. Batteries included. Works with all phones with a 2.5mm jack.



Part No.	Description	Price
<b>226270EF</b>	Hands-Free Headset w/ Radio ....	<b>\$9.95</b>

## Bargain Prices, hurry! Limited quantity of the best color & waterproof pocket GPS.



Map Send  
Software & 32MB  
Memory Card

Quite simply, the Magellan Meridian is the ultimate handheld GPS navigator. In your car, skipping across the water in your boat, strolling in the city, or hiking on the trail, this waterproof wonder with full-color 160x120 pixel backlit display and 3-meter accuracy will make your exact location jump off the screen.

The built-in mapping database features 16MB of cities, highways, landmarks, airports, and waterways in North America. Now, you can go exactly where you want to go with unparalleled ease. Its extra large and bright screen displays your exact location and surroundings, including roads, interstates, parks and other points of interest.

An integrated compass, speedometer and extensive text readouts show you everything you need to know to make your trips safer, easier and a lot more fun.

For only \$99.95 extra, you'll receive both an additional 32MB of memory (16MB more than our biggest competitors) and the MapSend software package that gives you incredibly detailed, street-level mapping capability. In fact, when you get your Meridian receiver, the only thing you won't be able to find is a better deal. We have a limited quantity. Order today.

Part No.	Description	Price
<b>219491EF</b>	Magellan Meridian and Software GPS	
	Was \$499.95 Now .....	<b>\$299.95</b>
<b>219571EF</b>	MapSend Software & 32MB Memory	
	Was \$149.95 Now .....	<b>\$99.95</b>

**Over 99% of our products are in stock! Place your order by 6PM EST for same business day shipment.**

Get accurate weather and navigational information and arrive faster without unpleasant surprises.



Mounts easily to your car windshield.



## Never get lost or surprised by a storm again.

Mount this precision compass and weather station on your car windshield and hit the road knowing not just where you're heading, but what you're heading into. The holographic LCD panel displays your direction, inside and outside temperature and barometric pressure. Press a button to see altitude and a weather forecast of sun, clouds or rain. If outside temperatures dip to 35°, a flashing "Ice Alert" warns you of skid conditions. Set a bearing

point, and the compass warns if you veer off-course. Activates and deactivates automatically to save battery life. Backlight comes on automatically after dark. Includes suction mounting bracket, 3V long-life lithium battery and 12V DC adapter (for emergency use with car lighter outlet). 2-year manufacturer's warranty.

Part No.	Description	Price
<b>222316EF</b>	Compass & Weather Forecaster	<b>\$119.95</b>

## Jump-start your car or fix a flat anywhere, without a stranger's help.

*A test meter shows the condition of your battery, so you won't waste time if it's not the problem.*

Worried about getting stranded on the road? Not when you pack your self-contained battery starter and air compressor! Just clamp the cables onto your battery terminals and start your car. Pump up a flat with the 260-PSI air compressor and drive to a service station to get it fixed. No phone calls. No waiting. No putting yourself at the mercy of strangers. But that's not all. You also get a built-in worklight and 12VDC car-type outlet that can power TVs, coolers and cellphones for up to 50 hours. Recharge the jump-starter from an AC outlet or your car's cigarette lighter using the AC and DC adapters (included). Output: 12VDC, 900 amps peak, 400 amps starting power.

Part No.	Description	Price
<b>223888EF</b>	Jump Starter with 260 PSI Air Compressor .....	<b>\$49.95</b>



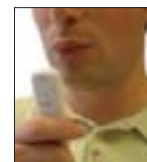
## The 10-second test that could prevent a lifetime of regret!

No one gets behind the wheel intending to wreck lives. But each year thousands do just that when they misjudge the amount of alcohol in their system. Now there's a simple way to make sure it doesn't happen to you or those you care about. \* Alc Alert quickly and discreetly checks blood alcohol level in less than 10 seconds. Just blow as if cooling soup on a spoon. At the sound of 3 beeps, stop and read the results. It's that easy. Buy one for yourself. Give them to everyone you cherish. Makes a thoughtful employee gift. Party guests actually have fun testing themselves. Gas sensor digital technology measures blood alcohol level (BAC) from .0% to .12%. The backlit display can be read in a dark car. Runs on 2 AAA batteries (included). Size: 3.5" x 1.25" x 0.5".

Part No.	Description	Price
<b>222332EF</b>	Alc Alert Breath Alcohol Detector .....	<b>\$49.95</b>

\* No device, no matter how sensitive, can substitute for common sense. If you think your ability to drive may be impaired even slightly, no matter what the test results show—don't drive.

*As small and portable as a cigarette lighter, Alc Alert displays blood alcohol level, showing when it's not safe to drive.\**



Just breath and get results in seconds.



## Fresh air in the worst traffic.

If you think the air is bad outside during your commute, it could be even worse inside your car. With the windows rolled up, your in-car environment may be concentrating the pollutants. Chances are, you and your car need a healthy shot of pure, fresh ionized air. Simply plug this compact, self-contained

device into your cigarette lighter and it goes to work immediately, removing dust, cigarette smoke, odors and even airborne bacteria to create a clearer, healthier indoor atmosphere.

Order one today, and see how billions of negative ions can have a positive effect on you and your health.



Part No.	Description	Price
219352EF	Auto Air Purifier & Ionizer ....	\$19.95



## Open virtually any garage door, while barely opening your wallet.

At this price you can afford to give one to each of the kids, and put one conveniently in each car! Programmable for virtually any existing garage door opener (see below), this one-button wonder augments your current set of garage-door remotes. A long-lasting, replaceable 12-volt battery is included.

Works with the following major brands and models: Genie #AR85 Series, Sears, Stanley, Chamberlain, Craftsman, Linear, Moore-O-Matic, Multi-Code, Wayne Dalton, Lift-Master and Master Mechanic.

Part No.	Description	Price
235539EF	Universal Garage Door Opener .....	\$19.95



## Stay tuned in and prepared for anything, even without batteries!

In any emergency, a radio can be your lifeline to the outside world. Ours is quite possibly the most versatile and useful emergency radio ever designed with 11-band coverage, including AM, FM, TV sound, weather band, and a full array of shortwave reception; all available in any situation. Oh, and it sounds great even without an emergency! Lifetime rechargeable batteries can keep the radio powered in four ways: 1) a built-in solar cell, 2) your car's cigarette lighter, 3) an AC wall adapter, and when all else fails, 4) a hand-operated internal dynamo. Just a one-minute crank of the dynamo provides a full 15 minutes of full-volume radio function. Makes your home and office a safer and more prepared place today.

Part No.	Description	Price
219299EF	World Band Dynamo & Solar Radio	\$69.95

## Kiss flat-tire worries goodbye!

With these two roadside helpers in your trunk, you can finally have portable peace of mind. Both the powerful impact wrench and the mini air compressor plug directly into the 12-volt lighter socket in your car. With its full set of bits, sockets and adaptors, the wrench will loosen the crankiest lug nuts in short order. The air compressor will keep your tires (including the spare) pumped for optimal performance, and can keep bike tires, balls, camping beds and pool/beach inflatables in top form, as well.

Part No.	Description	Price
235441EF	Wrench with Air Compressor .....	\$29.95



## Military-precision compass goes from traffic to trail automatically.

*Go from backroads to backpacking with confidence. The All-in-One Compass switches modes automatically.*

Ingenious design makes the All-in-One Compass two precision navigational instruments in one. In the cradle, it reads direction vertically for driving. Lifted out and held flat, it automatically switches to handheld mode for hiking. Car and hand icons indicate mode, so you can't make a mistake. Magnetic sensor

technology developed for the military and used by GM, Ford and Chrysler assures accuracy. Holographic display is easy to read in bright or low light. Pushbutton backlight lets you read in pitch blackness. Runs on two AAA batteries or 12-volt car adapter, both included. Auto turn-off conserves battery life. Size: 2.5"L x 2.5"W x 1"H.

Part No.	Description	Weight	Price
222324EF	Hikers and Drivers All-in-One Compass	0.72 lbs. ....	\$54.95

## Mini cooler/warmer works in your car, office, or almost anywhere!

Don't bother with the nasty office fridge. Keep a six-pack, your lunch, a snack, or anything else at hand;



and at optimal refreshment temperature. Our handy, stylish and convenient mini

fridge and warmer is high-tech and CFC-free. Cools 20-25°F from the ambient temperature or keeps food warm at up to a max of 154°F. Operating on either house current or power from your vehicle's lighter socket, the fridge handles a big 4-liter capacity to keep an ample supply of provisions fresh and ready to serve. Auto-shutoff and restart prevents problems.

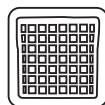
Part No.	Description	Price
219310EF	Mini Cooler & Warmer .....	\$79.99



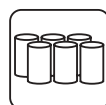
Standard Outlet



Car Outlet

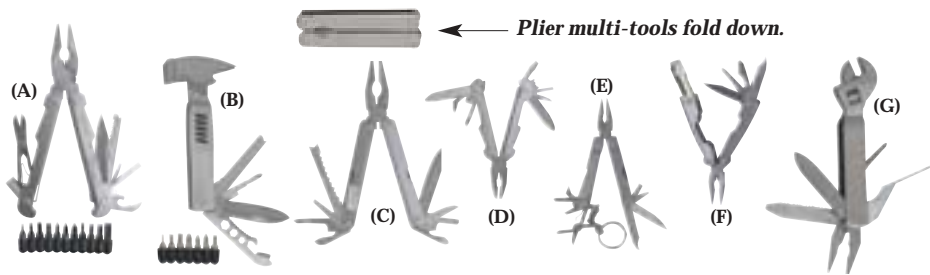


Slide Out Shelf



Holds a 6-pack





## Every tool you need...everywhere you go.

*These heavy-duty all-in-one tools are handy for the car, camping, fishing and hunting; but you'll also find them indispensable for urban living.*

Keep every tool you need at your fingertips...literally. Folded, these multi-function stainless steel tools fit in the palm of your hand or slip into the provided sheath on your belt. Perfect for students and others who don't want to spend a lot on tools they need only occasionally. Great gift for the handyman or sportsman.

Part No.	Description	Size	Weight	Price
227205EF	<b>21-in-1 Multi-Tool (A)</b> Includes handyman long nose pliers, wire cutter, saw blade, locking knife blade, scissors, can/bottle openers, pry bar, flat head screwdriver, 4 flat head screwdriver bits, 3 Phillips screwdriver bits, 4 hex bits, and a 1/4" nut driver.	4.75" closed	10.8 oz.	\$19.95
227213EF	<b>19-in-1 Multi-Tool (B)</b> Includes hammer, 2 nail removers, can/bottle opener, knife blade, 2 saws, 3 nut drivers Phillips screwdriver, 2 flat head and 3 Phillips screwdriver bits, and 2 hex bits.	5.0" long	10.1 oz.	\$19.95
227192EF	<b>13-in-1 Multi-Tool (C)</b> Includes handyman long nose pliers, wire cutter, knife blade, can/bottle openers, metal file, 3" ruler, awl, 2 flat head screwdrivers, Phillips screwdriver, pry bar, and nail pick.	4.0" closed	5.5 oz.	\$19.95
227184EF	<b>11-in-1 Multi-Tool (D)</b> Includes handyman pliers, wire cutter, knife blade, can/bottle opener, wood & metal files, hex nut drivers, awl, a mini and regular flat head screwdriver, and Phillips screwdriver.	3.0" closed	2.5 oz.	\$19.95
227221EF	<b>11-in-1 Multi-Tool (E)</b> Includes handyman long nose pliers, wire cutter, knife blade, can/bottle openers, metal file, nail pick, scissors, flat head screwdriver, Phillips screwdriver.	2.5" closed	2.0 oz.	\$11.95
227264EF	<b>9-in-1 Multi-Tool (F)</b> Includes spring loaded pliers, wire cutter, LED light, knife, bottle opener, metal file, nail pick, and both a Phillips and a flat head screwdriver.	2.75" closed	3.0 oz.	\$11.95
227176EF	<b>8-in-1 Multi-Tool (G)</b> Includes adjustable crescent wrench, spring loaded long nose pliers, wire cutter, knife blade, saw, flat head screwdriver, Phillips screwdriver, and metal file.	6.0" long	9.9 oz.	\$19.95



## Bushnell binoculars for less than \$20? Seeing is believing!

Convenient, portable and simple to use, let these compact, factory remanufactured binoculars bring you closer to the action. Insta®-Focus delivers crystal-clear, 12X images while you view. Fully coated lenses and tough rubber armor promise many seasons of trouble-free use. Includes carrying case and neck strap.

Part No.	Description	Price
235571EF	Bushnell Sport Binoculars	\$19.95

## A Zoom with a View

Whether you're a sports fan, birdwatcher or amateur PI, these 10x42 binoculars put you right in the middle of the action. They're waterproof and fog-proof for clear, all-weather viewing, and tough rubber armor helps withstand the rigors of all-purpose use. Plus, the zoom-in feature lets you easily adjust for the perfect view. Refurbished to like-new factory specs.

Part No.	Description	Price
236021EF	Bausch & Lomb Zoom Binoculars	\$99.95

NEW



## See in total darkness. Infrared Monocular gives you an edge.

*Like the infrared goggles worn by the U.S. military, Bushnell Night Vision lets you see them, but they can't see you.*



See in the dark without disturbing or alerting others. Night Vision Monocular uses military-grade image intensification technology to let you see clearly for up to 300 feet, even in pitch blackness. It's perfect for campers, hunters, hikers and wildlife enthusiasts... essential for surveillance and search-and-rescue work. Night Vision collects and amplifies the minute amount of light that exists even in what we perceive as pitch black. It converts the light into electrons that strike a phosphor screen, producing a detailed image just the way your TV does. High-speed f1.5 objective lens with 2.4X image magnification. FOV of 79 feet at 100 yards. Weighs 17 oz. with 2 AA batteries (included). Comes with roomy padded carry case with adjustable shoulder strap. 1-year manufacturer's warranty.

Part No.	Description	Price
219694EF	Night Vision Monocular & Case	\$199.00

## H2O-proof binoculars offer ringside seating through rain, sea and even spilled beer.



*The only binoculars you need to own, they'll take you through rain, sleet, snow, & wild weekends.*

A great gift idea for the outdoor or concert enthusiast at a fantastic price. These 8X compact Bushnell binoculars are completely impervious to wet weather, boating activities, water sports and even the occasional sailing beverage. And at this price, they're a tremendous value even if you live in the Sahara. Rubber armoring and O-rings seal out moisture. Nitrogen purging eliminates fogging, even in wet weather. Multi-coated optics ensure durability, clarity and reduced glare. Roll-down eyecups accommodate glasses. Offers a center focus, 25mm objective lens, and 370' field-of-view at 1000 yards.

**Includes:** Carry case with belt loop, neck strap and lens cloth.

Part No.	Description	Price
220409EF	Bushnell H <sub>2</sub> O Binoculars	\$44.95

## Never be without light again with our solar lantern.



The perfect light source for emergency situations. You will never run out of light with this rechargeable lantern. It features a three-way power system: solar power – charge the built-in battery during the day for night time use; 3-D size alkaline batteries; or AC/DC adapter that can also charge the built-in battery. Designed for indoor or outdoor activities with three unique features: solar fluorescent light, solar blinking light and solar searchlight.

- 8-10 hours in full sun for a fully-charged battery
- Up to 3 hours of operation when using flashlight and fluorescent light simultaneously; 10 hours of blinking light; 8 hours of torch light; 4 hours of fluorescent light
- Size: 5.6"W x 2.1"D x 11.5"H
- Weight: 1.8 lbs.

Includes: Strap and spare bulbs

Part No.	Description	Price
219598EF	Rechargeable Solar Lantern .....	\$69.95

## Power up with our lightweight solar cells.

Designed especially for the power and design needs of remote controlled aircraft, these lightweight solar modules open up a world of possibilities for model pilots and you. Top off your batteries while you're flying. Power your on-board wireless video rig, smoke system or scale lighting. These can be soldered from the back for a professional finish, and feature an extra seal for protection from the elements. Plus, the "PSA" modules are backed by pressure-sensitive adhesive for easy mounting on iron-on or other covering.

**NEW**



Part No.	Product No.	Operating Voltage (V)	Operating Current (mA)	Size (L x W x T)		Pricing		
				Inches	mm	1	10	100
228128EF	RC7.2-37	7.2	50	10.6 x 2.2 x .01	270 x 55 x 0.2	\$16.89	\$15.29	\$13.79
228136EF	RC7.2-37PSA	7.2	50	10.6 x 2.2 x .01	270 x 55 x 0.2	19.39	17.49	15.79
228144EF	RC7.2-75	7.2	100	10.6 x 3.5 x .01	270 x 90 x 0.2	29.89	26.99	24.29
228152EF	RC7.2-75PSA	7.2	100	10.6 x 3.5 x .01	270 x 90 x 0.2	32.89	29.79	26.79

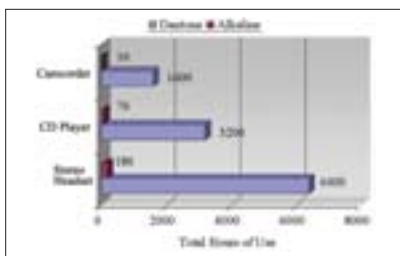
## Long-Lasting NiMH Batteries & Chargers

Why buy and throw away hundreds of batteries? Now you can reuse longer-lasting, money saving NiMH rechargeable batteries instead! They feature twice the power of NiCad batteries, so they're ideal for power-hungry devices like digital cameras and camcorders. The chargers below are specifically designed for NiMH batteries.

### NiMH Batteries

Part No.	Description	1	10	25
231095EF	2x AAA, 600mAh .....	\$6.95	\$6.25	\$5.65
231087EF	4x AA, 1600mAh .....	13.95	12.55	11.29
231116EF	2x C, 3000mAh .....	10.49	9.45	8.49
231124EF	2x D, 7000mAh .....	19.59	17.65	15.89
231108EF	1x "9V", 150mAh .....	8.39	7.95	7.59

Lasts 10-30 times longer than Rechargeable Alkaline!



**NEW**



### NiMH Chargers

231141EF: Compact battery charger with 4 AA batteries

231132EF: Universal battery charger for AAA, AA, C, D and "9V" cells (batteries not included)

- Selector switch for NiCd or NiMH type batteries
- Automatic charging current selection for different size of batteries

- Built-in IC timer control
- Recharge batteries in single or group
- LED lamp to indicate proper charging
- Fast charging in the specified period with automatic switch for trickle charge

Part No.	Description	1	5	10
231141EF	Compact AA charger ...	\$19.95	\$17.95	\$16.15
231132EF	Universal charger .....	19.95	17.95	16.15

Free Batteries!

**NEW**



## Writes anywhere, even underwater!

Durable and lightweight, our Fisher Space Pens are on all NASA space flights. They perform in any condition - upside down, at any angle, in extreme temperatures, on carbonless paper, or even underwater!

The secret is its unique design of a sealed-pressurized ink cartridge. Fisher vows an estimated 100 year shelf life. The Apollo XI Coin and Etched Pen Set commemorates our first manned lunar landing - a Fisher Space Pen was there. The Triple Action Pen allows your choice of black or red ink, or a PDA stylus;

all in one. Use your own pen to write anywhere using Fisher Space Pen Refills. Mont Blanc and Cross pens use the specific refills listed. Roller balls by Parker, Waterman, Pelikan, Lamy, Rotring, and Sheaffer use Fisher Space Pen Refills with the included adapters.



Save up to 20%!

Part No.	Description	Price
219395EF	Chrome Shuttle Pen .....	Was \$24.99 \$19.99
219408EF	Triple Action Pen .....	Was \$34.99 27.99
219387EF	Apollo 11 Pen & Coin .....	Was \$69.99 54.99

### Pen Refills

219483EF	Mont Blanc Med. Black .....	Was \$4.99 3.99
219475EF	Mont Blanc Med. Blue .....	Was \$4.99 3.99
219467EF	Cross Medium Black .....	Was \$4.99 3.99
219459EF	Cross Medium Blue .....	Was \$3.99 2.99
219441EF	Fisher Space Med. Black .....	Was \$4.99 3.99
219416EF	Fisher Space Med. Blue .....	Was \$4.99 3.99
219424EF	Fisher Space Med. Red .....	Was \$4.99 3.99
219432EF	Fisher Space Med. Green .....	Was \$4.99 3.99



## The Microcontroller Idea Book

The Idea Book introduces low end embedded microcontroller design. It provides practical designs for use with data loggers, controllers and small computer applications. (277 pages, 1997)

- Circuits, programs and applications featuring the 8052-BASIC single chip computer



Part No.	Description	Price
126375EF	Micro. Idea Book .....	\$25.85

## Practical Electronics Book for Inventors

**McGraw-Hill** Provides information needed for practical use in a format you can understand. With hand-drawn illustrations, this learn-as-you-go guide shows you what a particular device does, looks like and compares with other similar devices. Provides an easy-to-understand overview of basic components, resistors, diodes, capacitors, inductors, rectifiers, amplifiers, voltage regulators, discrete passive and active devices and so on. (604 pages, 2000)



Part No.	Description	Price
174529EF	Practical Electronics .....	\$39.95

## IC Projects for Hobbyist and Technicians

**Prompt Publishing** Written for hobbyists and technicians who are interested in projects for integrated circuits – projects that you will be able to breadboard quickly and test easily. (212 pages, 1997)



Part No.	Description	Price
143271EF	IC Projects Book .....	\$26.95

## Programming & Customizing PICmicro Microcontrollers

### Second Edition

**McGraw-Hill** Details the features of the PICmicro® and how to use these embedded chips to access and control many different devices. Shows what happens within the PICmicro® when an instruction is executed and how it interfaces with external devices. (1190 pages, 2001)

**Includes:** CD-ROM and PIC PCB



Part No.	Description	Price
183046EF	PICmicro Programming .....	\$49.95

## The Microcontroller Application Cookbook - Volume 2

**Woodglan Press** - Building on the foundations laid on the first volume, this volume contains schematics with complete part numbers as well as sample "code snippets" that demonstrates how each circuit works. This book focuses on the actual circuits and components, leaving the theory process behind and providing you the practical creation of a working circuit. The author has acknowledged Jameco Electronics for providing the components necessary in creating the circuits. (248 pages, 2002)



Part No.	Description	Price
212847EF	Microcontroller Cookbook Vol 2 .....	\$29.95
181681EF	Microcontroller Cookbook Vol 1 .....	26.95

## BASIC Stamp Data Book

**Newnes Publishing** Covers both the hardware and software of the Parallax BASIC stamp I and II microprocessor operation and design. The basic stamp is built on PC microcontroller hardware and uses PBASIC as its programming language which makes it simple to use and modify for beginners and professionals. (305 pages, 2000)



Part No.	Description	Price
143651EF	Basic Stamp Data Book .....	\$31.95

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**McGraw-Hill** Provides you with hands-on directions for putting Microchip's RISC-based chips with up to 8k of memory to work. Starting with simple projects and experiments, this book leads you gradually into sophisticated programming techniques. Provides you guidance on getting the equipment you need and programming your chip. (203 pages, 2000)



Part No.	Description	Price
174650EF	PIC Beginner's Guide .....	\$29.95

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### TAB Publishing

Explains how different types of motors operate, and how electronic control devices can be used to improve efficiency in a wide range of applications. (294 pages, 1994)



Part No.	Description	Price
137162EF	Electric Motors & Control .....	\$24.95

## Robot Builder's Bonanza

### TAB Publishing

This fascinating guide offers you a complete, unique collection of tested and proven project modules that you can mix and match to create an almost endless variety of highly intelligent and workable robot creatures. (753 pages, 2001)



Part No.	Description	Price
137171EF	Robot Builder's Bonanza .....	\$23.95

## Serial Port Complete

### Lakeview Research

RS-232 and RS-485 are the most versatile, inexpensive interfaces for linking, but the hardware and programming are often misunderstood. This book provides you with everything you need to design, program, install and troubleshoot the links you set up. (306 pages, 1998)



**Includes:** 3.5" diskette

Part No.	Description	Price
154771EF	Serial Port Complete .....	\$39.95

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### Lakeview (2nd Edition)

This USB Complete book provides an easy-to-use interface for computer peripherals. The book covers topics such as what USB can do, transfer types, chip choices, what's inside a USB controller, writing firmware, how the host communicates and more. (523 pages, 1999)



Part No.	Description	Price
171900EF	Complete USB Book .....	\$49.95

## Programming and Customizing 8051 Microcontrollers

**McGraw-Hill** Provides you with a complete understanding of the 8051 chip compatibles along with all the information needed to design and debug applications and control many different devices. Includes over 30 experiments, 12 projects and CD-ROM featuring source code and PDF data sheets. (541 pages, 1999)



Part No.	Description	Price
161402EF	Program/Customizing .....	\$29.99

## Oscilloscope Guide Book

**Prompt Publishing** This book's full illustrations and diagrams bring oscilloscopes to life. Learn how to use them to conduct many tests and measurement techniques. This book answers questions about various types of oscilloscopes and how to obtain useful test results. (214 pages, 2001)



Part No.	Description	Price
185404EF	Oscilloscope Guide Book .....	\$29.95

## TTL Logic Data Book

**Texas Instruments** Contains specifications and technical information on a broad line of TTL integrated circuits including Schottky TTL circuits. (1240 pages, 1988)



Part No.	Description	1	10
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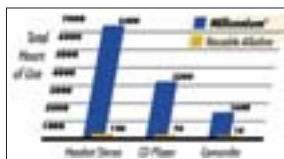


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151095EF



198791EF



33398EF



Part Number	Mfr. Cross Ref. No.	Description (V/Amp-hours/Dia.)	Battery Type	Terminals/Connection	Pricing			
					1	10	25	100
151095EF	GF6F22	9.0V/0.3A-h/1.0"L	Zinc chloride	Standard 9V	\$1.25	\$ .99	\$ .79	\$ .65
198791EF	MN1604	9.0V/.5A-h	Alkaline	9V	2.85	2.55	2.29	2.05
126754EF	TL5101S	3.6V/.85A-h/.579"	Lithium	Half AA (Macintosh*)	6.95	6.29	5.65	5.09
33398EF	TL5104P	3.6V/1.9A-h/.579"	Lithium	Barrel w/ lead (clock/memory)	5.95	5.49	5.19	4.85
33427EF	TL5242W	3.6V/1.9A-h	Lithium	Battery pack w/ plug (PC)	7.49	7.15	6.75	6.25
14162EF	CR2032	3V/180mA-h/.787"	Lithium	Coin cell (clock/memory)	1.25	1.00	.75	.53

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						Panasonic	YUASA	Eagle Picher			1	10
155328EF	TR4-6	6	4A-h	6.75-6.9	7.2-7.5	LCR6VP	NP4-6	CF16V4	2.8 x 1.9 x 4.0	1.8	\$10.49	\$9.25
159661EF	TR2.3-12	12	2.3A-h	13.5-13.8	14.4-15	LCR12V2.2P	NP2.3-12	CF12V1.5	7.0 x 1.3 x 2.3	1.9	16.95	15.25
155336EF	TR4-12	12	4A-h	13.5-13.8	14.4-15	LCR12V4PF	NP412	CF12V4	3.6 x 2.8 x 4.0	3.4	17.95	16.19
155344EF	TR7-12	12	7A-h	13.5-13.8	14.4-15	LCR12V7.2BP	NP712	CFM12V65	6.0 x 2.6 x 4.0	5.9	18.95	17.15
168188EF	TR12-12	12	12A-h	13.5-13.8	14.4-15	PS12120	—	CFM12V12	5.9 x 3.8 x 3.8	9.0	30.95	26.95
159679EF*	TR18-12	12	18A-h	13.5-13.8	14.4-15	LCR12V17BP	NPG18-12	CF12V18	7.1 x 3.0 x 6.6	13.8	33.95	28.95

\*159679EF: Bolt terminals w/ bolt & nut set

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By operating a button, the relay will be activated for the selected time.

- Output contact rating: 5A @ 200VAC
- Size: 3.0"L x 1.7"W x 1.2"H

Requires: Power supply 12V @ 50mA (recommend P/N 100095EF, see website)

Part No.	Description	1	10
147871EF	I-1 timer	\$19.95	\$17.95

CEBEK



### Computer Control Interface Kit ▲ 301-piece kit

Connects to printer port without interruption of the printer. Works in control applications such as the infrared transit/receiver (P/Ns 120555EF and 120547EF, pg 101).

- 16 I/Os with opto coupler
- Analog outputs: eight 8-bit (64 steps), one 8-bit (256 steps)
- Analog inputs: four 8-bit (256 steps) • Full opto-isolation with computer
- 3.5" driver disk w/ routines in C++, QBASIC, Turbo Pascal

Requires: DB25 cable (P/N 65787EF, pg 68)

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
128928EF	K8000	9.3"L x 5.3"W	1.7	\$139.95	\$125.95



velleman

### Universal Relay Card Kit ▲ 64-piece kit

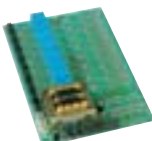
An electronic controller that switches higher currents while providing insulation between the controller and the controlled devices.

- Relay Output: Maximum 5A/220VAC
- Contact Voltage: 12VDC/250mA • TTL or CMOS inputs

Requires: 220 or 125VAC power source

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
128910EF	K6714	8.3"L x 5.9"W	1.8	\$59.95	\$53.95
144186EF	VR15M121C relay (JZC-22F)		0.028	3.79	3.39

128910EF



### Glass-Lens Red Laser Diode and Line Generator

#### 133292EF: Laser Diode

- Operating voltage: 4.0-6.0VDC (recommend P/N 112070EF, see website)
- Beam size at 7m: oval - 5mm x 8mm
- Wavelength: 660nm • Max. output: 4mW
- Beam divergence: 0.2mrad • Green LED indicator

134148EF



133292EF

#### 134148EF: 60° Line Generating Lens

- Adjustable focus range: 50 cm to ∞ • Lens construction: 3E.3G (glass)
- Back focal length: 1.5mm • Focal length: 8.0mm • Fan angle: 60°
- Beam divergence: 2.0mrad • Length at 1 meter dist.: 1.70 m

Part No.	Description	1	10
133292EF	Glass laser diode.....	\$44.95	\$39.95
134148EF	60° lens	12.95	11.49

Class IIIa Laser Product

### Laser Diode Module

Class IIIa Laser Product

- Operates on 3VDC @ <5mW
- 670nm wavelength • Beam diameter: 3.2mm
- Working distance: over 50 meters/yards (daylight), 200 meters/yards (dark) • Size: 0.9"L x 0.3"Dia.

Part No.	Description	1	10	25
131203EF	Laser module, brass	\$44.95	\$40.49	\$36.45



### Laser Diode and Driver

#### 182932EF: Laser Diode

Class IIIa Laser Product

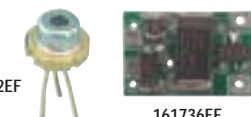
- Optical output power: ≤5mW maximum
- Operating current: 30mA • 5.6mm pkg size
- Operating voltage: 2.6V maximum • Lasting wavelength: 650nm typical
- Beam divergence of 11 degrees from center line maximum

#### 161736EF: Laser driver w/ regulator

Part No.	Description	1	10
182932EF	650nm laser diode	Was <del>\$19.95</del> \$11.95	\$10.79
161736EF	Laser driver	7.95	6.95

182932EF

161736EF





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|--------|--------|--------|
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**Dual Adjustable Regulated Power Supply Kit**

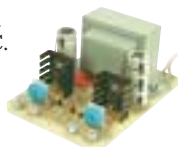
■ 48-piece kit

Build a dual adjustable power supply for your circuits. Outputs positive-negative voltages from  $\pm 5$  to  $\pm 15$ VDC.

- Adjustable positive and negative supplies  $\pm 5$  to  $\pm 15$ VDC, 175mA – 750mA per supply • 120VAC input
- LED on indicator • PC board construction

Includes: Components and hardware

Part No.	Mfr. Cross Ref. No.	Dimensions	Wt. (lbs.)	1	10
20626EF	JE215	5.1"L x 3.5"W x 2.0"H	2.1	\$22.95	\$20.49

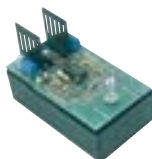
**DC Motor Speed Control Kit**

■ 35-piece kit

- This kit uses Pulse Width Modulation to vary the speed of a DC motor and maintain torque
- For motors up to 100VDC/5A max.

Requires: 5-16VDC supply (recommend P/N 114825EF, see website)

Part No.	Description	Dimensions	1	10
127829EF	Motor control kit	3.6"L x 2.3"W x 1.2"H	\$19.95	\$17.95

**Distance and LED Kits**

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**Parking Radar Kit** ■ 55-piece kit

Parking in tight places can be difficult, but this unit can tell you when you have come within an adjustable preset distance of the object behind you.

- Detection range: 5cm – 1.5m; angle: 5°
- Transmitter frequency: 40kHz
- PCB size: base (4.9"L x 1.9"W) sensor (3.8"L x 1.1"W)

Requires: 10-15VDC @ 16mA max (recommend P/N 100095EF, see website) or auto power plug (recommend P/N 115001EF, see website)

Part No.	Product No.	Price
129120EF	K3502	Was \$44.95 \$39.95

**Senix Distance Sensor Modules**

Sends out a sound wave 20 times per second and calculates the distance based on the time differential between send and receive signals. The distance is represented by an output voltage from 0 to 10VDC (P/N 134105EF) or RS-232 signal (P/N 151482EF).

- Sensing range: 4" to 60"
- Sensor diameter: 1.8"
- Board size: 2.8"L x 1.8"W x 0.9"H
- One-year warranty

Requires: 15 to 24VDC @ 40mA (not included), recommend P/N 114825EF, see website

**134105EF:** • Output voltage: 0-10VDC  
• Each 1VDC increment = 5.6"  
(e.g.: 1VDC output = 9.6")

**151482EF:** • RS-232 output

Includes: Disk and computer cable

Part No.	Description	Wt. (lbs.)	1	10
134105EF	Sensor – voltage output	0.2	\$159.95	\$143.95
151482EF	Sensor – RS-232 output	1.0	179.95	161.95



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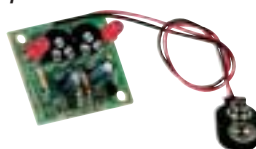
**Flashing LED Kit** ■ 23-piece kit

Activates 2 flashing LEDs for applications such as model constructions. Adjustable flashing speed by potentiometers.

- 5.5" wire w/ 9V battery connector
- Minimum consumption: 4mA

Requires: 9VDC battery (P/N 151095EF, pg 95)

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
147580EF	MK102	1.3"L x 1.4"W x 0.6"H	0.1	\$7.95	\$7.19

**Unipolar Stepper Motor Driver Kit**

■ 29-piece kit

- Will drive unipolar stepper motors rated up to 6-30VDC @ 1.25A • Onboard 5VDC regulator
- Drives 5, 6 or 8 lead unipolar stepper motors

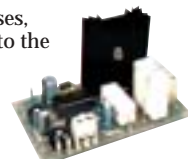
Part No.	Description	Dimensions	1	10
139109EF	Stepper motor	2.6"L x 1.9"W x 1.0"H	\$29.95	\$26.95

**DC to Pulse Width Modulator Kit** ▲ 40-piece kit

The circuit converts a DC voltage into a series of pulses, such that the pulse duration is directly proportional to the value of the DC voltage.

- PWM range: 0 to 100%
- PWM frequency: 100Hz to 5kHz (adjustable)
- Operating voltage: 8 to 35VDC
- Min. consumption: 35mA
- Max. output current: 6.5A • Efficiency: better than 90% at full load
- Adjustable sensitivity: 2.5 to 35VDC

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
120539EF	K8004	3.3"L x 1.9"W x 1.8"H	0.5	\$22.95	\$20.49

**Test & Measurement Kits**

Crossbow

**Accelerometers and Interface****141591EF 1-Axis and 141575 3-Axis Accelerometers**

- Dynamic range and excellent frequency response
- Acceleration range:  $\pm 4g$  • Shielded cable: 2'L pigtail

Requires: 5VDC power supply (recommend P/N 164101EF, pg 37)

**141583EF: Digital Accelerometer Interface**

- Measures acceleration, impact, tilt, vibration, etc.
- Simple digital interface for 1-axis and 3-axis
- Plugs into any RS-232 port @ 38.4k baud
- 200Hz max. sampling rate

Requires: DB9 male to female cable (recommend P/N 25700EF, pg 68)

Includes: User friendly graphical software and 9VDC @ 500mA power supply

Part No.	Description	Axis	Current	1	10
141591EF	CXL04M1	One	8mA	Was \$119.95 \$149.95	\$134.89
141575EF	CXL04M3	Three	24mA	319.95	299.95
141583EF	Digital interface card			312.95	299.95

**Accelerometer Evaluation Boards****Dual Axis**

Evaluation board for the ADXL202, dual axis, 2g accelerometer.

**177308EF:** features RS-232 interface to connect to PC serial ports. Also includes software to display real time acceleration data.

Part No.	Product No.	Description	1	10
177287EF	ADXL202EB	Dual axis	\$59.95	\$53.95
177308EF	ADXL202EB-232	w/ RS-232	159.95	144.95

**Function Generator Kit** ■ 21-piece kit**Sine, Triangle and Square Wave**

Great for prototyping electronic circuits. Produces waveforms at frequencies continuously variable from 1Hz to 100kHz.

Requires: 12VDC supply or  $\pm 6$ VDC split supply (recommend P/N 20626EF, top left)

Part No.	Mfr. Cross Ref. No.	Dimensions	1	10
20685EF	JE2206	4.1"L x 1.5"W	\$24.95	\$22.95

**Vector 2X Compass Module**

- 2" accuracy, 1" resolution
- 3-wire serial output format
- Hard iron calibration
- 5Hz sampling rate
- Pin selectable BCD or binary output format

Requires: Power supply 5V @ 10mA (recommend P/N 112070EF, see website)

Part No.	Description	1	10	25
126703EF	Vector 2X module	\$49.95	\$44.95	\$39.95





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## RF Code Lock Transmitter and Receivers ▲

- Use for car alarms, garage doors, door locks, lighting control, etc.
- Over 8000 selectable codes
- Use several transmitters with one receiver
- Receivers feature relay output (10A change-over or pulse contact)
- Range: 100 ft.

**117647EF Transmitter:** use with P/N 173235EF & 117655EF

**Requires:** Transmitter: 12V battery type V23G;  
receivers: 12-16VDC @ 100mA  
(recommend P/N 100095EF, see website)



173235EF



117655EF

Part No.	Description	Kit Pieces	Wt. (lbs.)	1	10
117647EF	K6706 2-ch transmitter (RF)	29	0.3	\$16.95	\$15.25
173235EF	K6727 2-ch receiver (RF)	75	0.5	\$39.95	\$35.95
117655EF	K6707A 1-ch receiver (RF)	75	0.5	\$29.95	\$26.99

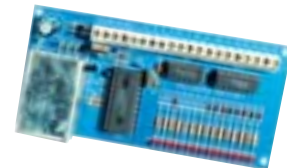
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## 15-Channel Infrared Transmitter & Receiver ■

- Applications: remote on-off switch, alarms, garage door opener, etc.
- 15 independent channels
- Transmitter/receiver range: ±30 meters
- 120555EF Transmitter:** Requires: 9VDC battery. (recommend P/N 151095EF, pg 95)
- 120547EF Receiver:** • Each output can be a change-over or pulse contact switch
- Output: 50VAC @ 500mA max.
- PCB dimensions: 2.8"L x 5.7"W
- Requires:** 8-14VDC (recommend P/N 100095EF or 129314EF, see website)

Part No.	Description	Kit Pieces	Weight (lbs.)	1	10
120555EF	K6710 15-channel transmitter	37	0.8	\$69.95	\$62.95
120547EF	K6711 15-channel receiver	76	0.5	\$49.95	\$44.95

120555EF



120547EF

## Audio Transmitters, Amplifier and Speech Recognition Kits

### FM Stereo Transmitter Mini Kit ■ 37-piece kit

Run your own FM radio station! Plug any stereo signal into this unit and it will be transmitted to any FM radio. Tuneable from 76-108MHz. Plug in a CD player or tape deck and you have a wireless link to an FM radio within 200 feet. Clarity is approximately 40dB stereo separation.

**Requires:** 9VDC power supply  
(recommend P/N 151095EF, pg 95)

Part No.	Description	Dimensions	1	10
151239EF	FMST-100 stereo kit	2.7"L x 2.0"W	\$29.95	\$26.95



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### Universal Mono Pre-Amplifier ■ 17-piece kit

For audio applications with insufficient input signal.

- Output impedance: 1kΩ
- Max. input signal: 40mV
- Frequency range: 20Hz - 20kHz +/-3dB
- Adjustable output level: 40dB max.

**Requires:** 10/30VDC @ 10mA power supply  
(recommend P/N 20626EF, pg 100)

Part No.	Product No.	Dimensions	1	10
117612EF	K1803	1.2"L x 1.8"W	\$8.95	\$7.95



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### 30-Watt Stereo Power Amplifier ■ 38-piece kit

General purpose stereo amp for audio applications.

- RMS output: dual 15W @ 4Ω or dual 10W @ 8Ω
- Frequency bandwidth: 7Hz to 60kHz (-3dB)
- Separation: 70dB
- Supply voltage: 24VCT @ 2A (recommend P/N 101864EF, pg 34)

Part No.	Product No.	Dimensions	1	10
129138EF	K4003	2.8"L x 2.0"W	\$29.95	\$26.95



## Infrared Remote-Control Receiver Modules

- Commonly used in TVs, VCRs, audio equipment, car stereos and home computers that receive signals or data via infrared
- Single unit module which incorporates a PIN diode & a receiving preamplifier IC
- Excellent mechanical strength and electrical stability
- 940nm wavelength
- Size: 0.6"L x 0.6"W x 0.5"H



165008EF

**SALE**



176541EF

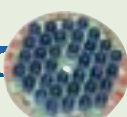
Part No.	Description	Voltage Input	1	10
165008EF	40.0kHz, top view	5VDC @ 5mA	\$2.99	\$2.69
176541EF	56.8kHz, side view	5VDC @ 2mA	1.95	1.79

### IR LED Illuminator Kit ● 41-piece kit

- Improve low-light camcorder and CCD camera images without visible light
- 36 high powered infrared LEDs
- At 24" the beam is approximately 3.5' across

**Requires:** 12-15VDC power supply  
(recommend P/N 114825EF, see website)

Part No.	Description	Dimensions	1	10
157964EF	IR Illuminator kit	2" Dia.	\$16.95	\$15.29



### Super Mini 2.5W Audio Power Amplifier ■ 27-piece kit

This circuit has incredibly tiny dimensions. The IC has a pre-amplifier and power amplifier, which can be used separately by cutting a jumper.

- Operating frequency: 60Hz to 15kHz
- Max. output power: 2.5W (4Ω, 12V)
- Short circuit/thermal overload protection

**Requires:** 4.5-15VDC @ 400mA pwr. supply (recommend P/N 114825EF, see website)

Part No.	Product No.	Dimensions	1	10
127175EF	K2637	1.7"L x 1.3"W x 1.1"H	\$10.95	\$9.95



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### 7-Watt Amplifier Kit ■ 22-piece kit

- Music output power: 7W/4Ω
- RMS output: 3.5W/4Ω & 2W/8Ω
- Harmonic distortion: 0.05% (1W/1kHz)
- Frequency response: 20 to 20kHz (-3dB)
- Short circuit/overload protection

**Requires:** 15VDC (8-18VDC) @ 500mA power supply  
(recommend P/N 155803EF, pg 37); speakers

Part No.	Product No.	Dimensions	1	10
127255EF	K4001	2.2"L x 1.4"W	\$13.95	\$12.49



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### Voice Activated LEDs Kit ■ 33-piece kit

Uses sound to activate the flashing of 4 bright red LEDs.

- Power consumption: 0.5mA min./12mA max.
- Adjustable sensitivity

**Requires:** 8-15VDC power supply (P/N 100095EF, see website)  
or 9VDC battery (P/N 151095EF, pg 95)

Part No.	Product No.	Dimensions	1	10
147571EF	MK103	2.5"L x 1.6"W x 1.4"H	\$9.95	\$8.95



**BASIC Stamps**

BASIC Stamps are small computers using a variation of BASIC to control execution of many applications. The BS1-IC has 8 I/O lines, while the BS2-IC has 16 I/O lines which can be connected directly to buttons, LEDs, registers, and many other TTL level devices. Each allows you to store data in the EEPROM before downloading a BASIC program.

Specifications:	127693EF	130892EF
EEPROM	256 bytes	2048 bytes
RAM	16 bytes	32 bytes
Cur. Draw @ 5V	2mA run/20µA	8mA run/100µA
Microcontroller	PIC16C56	PIC16C57
Program speed	2000/sec.	4000/sec.
# of I/O Pins	8	16 + 2 serial
Package	14-pin SIP	24-pin DIP

**140071EF: BASIC Stamp<sup>2</sup> Starter Kit w/ BS2-IC (27203EF)**

Includes the super carrier board, software, manual and programming cable. BASIC Stamp 2 can be connected directly to buttons, LEDs, registers and many other TTL devices.



Part No.	Parallax No.	Wt. (lbs.)	1	10
127693EF	BS1-IC	0.01	\$33.95	\$32.29
130892EF	BS2-IC	0.01	Was \$49.95 <b>45.95</b>	<b>41.95</b>
140071EF	27203 Kit	1.9	Was \$149.95 <b>139.95</b>	<b>139.95</b>

**50MHz BASIC Stamp 2SX Module**

High-speed version of BS2-IC with additional RAM and EEPROM.

- Microcontroller: Ubicom SX28AC
- Program execution speed: 10,000 instructions/sec.
- Volts required: 5-12 VDC
- EEPROM program size: 8 x 2k bytes, 4,000 instructions
- Scratch pad RAM: 64 bytes
- Current draw @ 5V: 60mA run/200µA sleep
- Number of I/O pins: 16 + 2 serial
- RAM size: 32 bytes
- Size: 1.2"L x 0.6"W



Part No.	Parallax No.	1	10
159775EF	BS2SX-IC 24-pin	\$58.95	\$55.95

**BASIC Stamp 2P Modules**

In addition to the BS2-SX (above) features, includes new commands for HD44780 compatible LCDs, Dallas Semiconductor 1-wire and Philips I2C parts.

- Program execution speed: 12,000 instructions/sec.
- RAM size: 38 bytes
- Scratch pad RAM: 128 bytes
- Program size: 8 x 2k bytes, 4,000 instructions
- Current draw @ 5V: 40mA run; 400µA sleep
- 184911EF: • Number of I/O pins: 16 + 2 serial
- 184920EF: • Number of I/O pins: 32 + 2 serial



Part No.	Parallax No.	1	10
184911EF	BS2P24-IC 24-pin	\$78.95	\$71.95
184920EF	BS2P40-IC 40-pin	98.95	89.95

**Stamp Works Kit**

This all-in-one kit takes you beyond theory, into a well-written collection of 32 experiments that will teach you first class BASIC Stamp programming. You'll learn to get the most out of the BASIC Stamp and to increase its versatility by connecting to popular active and passive components.



Part No.	Parallax No.	Price
184946EF	27297	\$348.95

**BASIC Stamp Prototyping Boards**

Optional boards for BS1-IC, BS2-IC and BS2SX-IC Stamps.

- Easy use of Stamp with prototyping area, 9-volt battery clips, I/O header, reset button, and programming connector
- 130921EF: Use w/ P/N 130892EF, left
- 164726EF: Use w/ P/N 127693EF, 130892EF and P/N 159775EF, left



Part No.	Parallax No.	1	10
130921EF	27120	\$27.95	\$24.95
164726EF	27130	48.95	46.55

**In-System Programming Kit**

This unique development tool programs Scenix SX chips in-system & performs in-circuit source-level debugging. Supports every Scenix Semiconductor chip that is commercially available.

- Includes SX Key software, SX Tech Board, 2 SX 28AC/DP 50 MIPS chips, 1 Murata 50MHz resonator, printed manual, CD ROM, power supply and serial cable
- DB-9 serial connector connects to RS-232 port using serial cable
- 4-pin connector on other side of tool plugs into the SX's Vss, Vdd, OSC1 and OSC2 pins
- Windows<sup>®</sup> 95/98/NT compatible



See Page 21 for Microcontroller chips

Part No.	Parallax No.	Price
176583EF	45180	\$174.95

**50MIPS SX Microcontrollers**

Part No.	Parallax No.	1	10
162931EF	SX28AC/DP (28-pin DIP pkg)	\$5.49	\$5.25

**Parallax's "Stamps In Class" Series Kits**

*Enabling Students to "Micro-Control" the World*

Learn BASIC Stamp programming essentials from the experts. Each kit combines an educational book with the components needed to cover robotics, process control and microcontroller interfacing. The program emphasizes creative PBASIC programming in the classroom. For use with the "Board of Education" below.

**Robotics**

Build a BOE-BOT by adding a chassis, servo motors, power supply, and proximity sensor to your Board of Education (right). Experiments cover basic programming and servo control, sensor interfacing using an infrared LED and receiver, light following, and communication between BOE-BOTs.



- Experience: moderate
- 84 piece kit with book

**Requires:** BS2 starter kit (P/N 140071EF, see website)

Part No.	Parallax No.	Price
170131EF	28154	\$134.95

**"Board of Education"**

The BOE was designed in coordination with Parallax's educational customers to teach microcontroller programming and interfacing.



- Mechanically interlocked power supply to prevent dual connection of wall-pack and 9-volt battery
- DB9 connector for BS2-IC programming and serial communication during run-time
- P0 - P15 I/O pins, Vdd and Vss connections brought adjacent to 2" x 1-3/8" breadboard area
- Traces on top of the board show connections between BS2-IC and breadboard connections

**Includes:** Set of ten 10 color-coded 22 gauge wires

Part No.	Parallax No.	1	10
162536EF	28150	Was \$59.95 <b>\$54.95</b>	<b>\$49.95</b>
202331EF	BS2P40 adapter	24.95	24.95

**BS2P Professional Starter Kit**

Provides the engineer with all the parts required to get started with the BSP2 microcontroller. The kit includes a selection of components and ready-to-run source code that will help master some of the exciting new features of the BSP2.

**Includes:** Programming manual, BS2P demo board, BS2P-24 microcontroller, DB9 (serial) programming cable, PCF8583 chip, 32.678kHz crystal, 24LC32 serial EEPROM, DS1822 thermometer, (3) 4.7K resistor, jumper wires.



Part No.	Parallax No.	Description	Price
202323EF	27235 kit	BS2P professional starter kit	\$194.95
202331EF	BS2P40	BS2P40 adapter	24.95

Visit [www.Jameco.com/Kits](http://www.Jameco.com/Kits) for our complete selection of kits.



## OWI® Robotic Arm Trainer Kit ▲ 109-piece kit

### Five Axes of Motion

Test your motor skills as you build and control the arm. This unit can be commanded or instructed through its five-switch wired controller with lights to grab, release, lift, lower, rotate wrist, and pivot sideways.

- Max. length outwards: 14.2"
- Max. height upwards: 20.1"
- Max. lifting capacity: 4.6 oz.
- Elbow moving range @ 135°
- Rotates left to right at the base @ 350°
- Grip opens to 2" wide
- Shoulder movement @ 120°
- Weight: 4.5 lbs.

Requires: 4 D batteries (not included)

Part No.	Description	Price
157366EF	Robotic arm kit (unassembled)	\$74.95
159345EF	Robotic controller software (assembled)	84.95

## Robotic Arm PC Interface Kit ▲ 31-piece kit

With a PC and the software provided, you can program this interface kit for the robotic arm to do a sequence of movements at precise steps or repeat the sequence.

Includes: DB25 male to female cable & software diskette

Part No.	Description	Price
208637EF	PC Interface Kit	\$54.95

## OWI® Line Tracking Robot Kit ▲ 134-piece kit

Watch as this robot follows a black line you specify. Utilizes infrared light to detect the line and control direction. This educational kit utilizes the same line follow principle of many industrial robots.

Part No.	Description	Dimensions	Wt. (lbs.)	Price
140839EF	Line tracker kit	12.0"L x 7.0"W x 3.5"H	1.1	\$49.95

## Flex Sensor

- Maximum resistance: 30kΩ to 40kΩ, proportional to the degree of flexing or bending
- Applications: virtual reality data gloves, robotic, bio-metric, physics and engineering

Part No.	Description	Nominal Resistance	1	10
150551EF	Flex sensor	10kΩ	\$12.95	\$11.65

**Don't worry about back orders.  
Over 99% of our products are in stock!**

## 8-Pitch Gears and Gear Set

- Works with DC motors with 0.08" shaft diameter
- Heavy-duty plastic construction • Pitch: 0.125"
- 162392EF: 0.15" bore to 0.070" bore
- 131801EF: 20-piece gear set includes 2 each of the following: T10, T20, T30, T40, T50 and 10 bushings

							SALE			increments of 10		
Part No.	Mfr. Cross Ref. No.	Description	Shaft Bore	O.D.	Press Fit Shaft Dia.	Gear Dia.	1	10	100			
162069EF	T10	10 teeth	0.151"	0.48"	0.156 (5/32)"	0.457" .....	\$ .69	\$ .62	\$ .59			
162077EF	T20	20 teeth	0.151"	0.875"	0.156 (5/32)"	0.855" .....	.59	.50	.39			
162085EF	T30	30 teeth	0.151"	1.27"	0.156 (5/32)"	1.239" .....	.49	.42	.36			
162093EF	T40	40 teeth	0.151"	1.67"	0.156 (5/32)"	1.634" Was \$0.99 .....	.33	.30	.27			
162106EF	T50	50 teeth	0.151"	2.07"	0.156 (5/32)"	2.016" Was \$0.99 .....	.35	.30	.25			
162392EF	BUSH1	Bushing	0.075"	—	0.078 (5/64)"	0.160" .....	*	.24	.22			
Part No.	Mfr. Cross Ref. No.	Description					1	10	50			
131801EF	GA1	Gear set – 20 piece (see description above) .....					\$7.99	\$7.29	\$6.49			

## 16-Pitch Sprocket Set and Chain

- Operates in high humidity and corrosive environments
- Chain tension load: 2.0 lbs.
- 168276EF: 14-piece sprocket set includes 1 each of the following: 8, 9, 10 teeth at 1/8" bore size; 12, 15, 16, 18, 20, 24, 30, 32, 36, 40 and 48 teeth at 1/4" bore size

Part No.	Mfr. Cross Ref. No.	Description	1	10	25
157075EF	C1227	Drive chain (12" long)	\$9.95	\$8.95	\$7.95
168276EF	8890	Sprocket set - 14 pieces (see description above)	29.49	26.49	23.89

## MONDO•TRONICS Flexinol Muscle Wires®

These unique nickel-titanium alloy Muscle Wires® actually shorten in length when electrically powered, and can lift thousands of times their own weight. • Length: 1 meter

**How it works...** Pressing the switch lets power flow from the batteries through the Muscle Wire®, heating it and causing it to contract and raise the lever and lift the weight. When power is removed, the Muscle Wire® cools and relaxes, and the weight helps it return to its starting position.

### 141348EF: Muscle Wires® Book & Deluxe Kit

- Kit includes one each Flexinol 100, 150 and 250 Muscle Wires® (below) and Project Book • 3 meters of wire

Includes: Crimps and instructions

Part No.	Desc.	Linear Wire Dia. (microns)	Typical Resistance (ohm/m)	Deform Current (mA)	Recovery Weight* (grams)	Weight* (grams)	Typical Rate**	Pricing	
								1	10
141321EF	100LT	100	150	180	28	150	33	\$15.95	\$14.49
141874EF	150LT	150	50	400	62	330	20	16.95	15.29
160055EF	375LT	375	8	2750	393	2000	4	19.95	17.95

\* Multiply by 0.0098 to get force in Newtons \*\* Cycles per minute, in still air, at 20° Centigrade

Part No.	Description	1	10
141348EF	Muscle Wires® kit	\$59.95	\$53.95

## Obstacle Avoidance Robot Kit ▲ 107-piece kit

Six crank motion legged robot utilizes an infrared light sensing system to find obstacles and maneuvers itself around them. This IR detection kit includes an infrared diode, photo diode, IC, 2 DC motors and all hardware.

Part No.	Description	Dimensions	Wt. (lbs.)	Price
140821EF	Spider kit	12.0"L x 7.0"W x 3.5"H	1.2	\$59.95

## MONDO•TRONICS Electric Pistons™

### Deluxe 5 Pack

The Electric Piston is a shape memory alloy actuator that pulls with up to one pound of force and contracts by 20mm. Typical activation requires one volt at five amps for two seconds. Plus, mount several pistons in parallel for more strength, and in series for longer strokes.

- 1 volt @ 5 amps

Includes: Five pistons, battery, leads and plans for four complete projects

Part No.	Description	1	10
141903EF	Electric piston pack	\$39.95	\$34.95

## High-Efficiency Robotic Servo

Excellent power-to-weight ratio for robotic projects.

- Supply voltage: 4.8-6 volts
- Torque: 49 oz.-in. @ 4.8V
- Speed: 16 seconds to 60°
- Size: 0.8"W x 1.4"D x 1.6"H

Part No.	Mfr. Cross Ref.	1	10
157067EF	14500	\$19.95	\$17.95

## Giant Robotic Ball-Bearing Servo

Extremely powerful! Perfect for large robotic projects where power is a must.

- Power supply voltage: 4.8-6 volts
- Torque: 161 oz.-in.
- Speed: 19 seconds to 60°

Part No.	Description	1	10
166351EF	Giant robotic servo	\$49.95	\$44.95

More @ [www.Jameco.com/Kits](http://www.Jameco.com/Kits)

Complete selection on our website.